

For the reasons set out in the preamble, title 40, chapter I, of the Code of Federal Regulations is proposed to be amended by adding part 94 as set forth below.

PART 94 - CONTROL OF AIR POLLUTION FROM MARINE COMPRESSION-IGNITION ENGINES

Subpart A - General Provisions for Emission Regulations for Marine Compression-Ignition Engines

Sec.

- 94.1 Applicability.
- 94.2 Definitions.
- 94.3 Abbreviations.
- 94.4 Treatment of confidential information.
- 94.5 Reference materials.
- 94.6 Regulatory structure.
- 94.7 General standards and requirements.
- 94.8 Exhaust emission standards.
- 94.9 Compliance with emission standards.
- 94.10 Warranty period.
- 94.11 Requirements for rebuilding certified marine engines.

Subpart B - Test Procedures

- 94.101 Applicability.
- 94.102 General provisions.
- 94.103 Test procedures for Category 1 marine engines.
- 94.104 Test procedures for Category 2 marine engines.
- 94.105 Test cycles.
- 94.106 Supplemental test procedures.
- 94.107 Determination of rated speed.
- 94.108 Test fuels.

Subpart C - Certification Provisions

- 94.201 Applicability.
- 94.202 Definitions.
- 94.203 Application for certification.
- 94.204 Designation of engine families.
- 94.205 Prohibited controls, adjustable parameters.
- 94.206 Required information.
- 94.207 Special test procedures.
- 94.208 Certification.
- 94.209 Special provisions for post-manufacturer marinizers.
- 94.210 Amending the application and certificate of conformity.

- 94.211 Emission-related maintenance instructions for purchasers.
- 94.212 Labeling.
- 94.213 Submission of engine identification numbers.
- 94.214 Production engines.
- 94.215 Maintenance of records; submittal of information; right of entry.
- 94.216 Hearing procedures.
- 94.217 Emission data engine selection.
- 94.218 Deterioration factor determination.
- 94.219 Durability data engine selection.
- 94.220 Service accumulation.
- 94.221 Application of good engineering judgment.

Subpart D - Certification Averaging, Banking, and Trading Provisions

- 94.301 Applicability.
- 94.302 Definitions.
- 94.303 General provisions.
- 94.304 Compliance requirements.
- 94.305 Credit generation and use calculation.
- 94.306 Certification.
- 94.307 Labeling.
- 94.308 Maintenance of records.
- 94.309 Reports.
- 94.310 Notice of opportunity for hearing.

Subpart E - Emission-related Defect Reporting Requirements, Voluntary Emission Recall Program

- 94.401 Applicability.
- 94.402 Definitions.
- 94.403 Emission defect information report.
- 94.404 Voluntary emissions recall reporting.
- 94.405 Alternative report formats.
- 94.406 Reports filing: record retention.
- 94.407 Responsibility under other legal provisions preserved.
- 94.408 Disclaimer of production warranty applicability.

Subpart F - Production Line Testing

- 94.501 Applicability.
- 94.502 Definitions.
- 94.503 General requirements.
- 94.504 Right of entry and access.
- 94.505 Sample selection for testing.
- 94.506 Test procedures.
- 94.507 Sequence of testing.

- 94.508 Calculation and reporting of test results.
- 94.509 Maintenance of records; submittal of information.
- 94.510 Compliance with criteria for production line testing.
- 94.511 [Reserved]
- 94.512 Suspension and revocation of certificates of conformity.
- 94.513 Request for public hearing.
- 94.514 Administrative procedures for public hearing.
- 94.515 Hearing procedures.
- 94.516 Appeal of hearing decision.
- 94.517 Treatment of confidential information.

Subpart G - [Reserved]

Subpart H - Recall Regulations

- 94.701 Applicability.
- 94.702 Definitions.
- 94.703 Applicability of Part 85 Subpart S.

Subpart I - Importation of Nonconforming Engines

- 94.801 Applicability.
- 94.802 Definitions.
- 94.803 Admission.
- 94.804 Exemptions.
- 94.805 Prohibited acts; penalties.

Subpart J - Exclusion and Exemption Provisions

- 94.901 Purpose and applicability.
- 94.902 Definitions.
- 94.903 Exclusions.
- 94.904 Exemptions.
- 94.905 Testing exemption.
- 94.906 Manufacturer-owned exemption, display exemption, and competition exemption.
- 94.907 Non-marine-specific engine exemption.
- 94.908 National security exemption.
- 94.909 Export exemptions.
- 94.910 Granting of exemptions.
- 94.911 Submission of exemption requests.

Subpart K - [Reserved]

Subpart L - General Enforcement Provisions and Prohibited Acts

- 94.1101 Applicability.
- 94.1102 Definitions.
- 94.1103 Prohibited acts.
- 94.1104 General enforcement provisions.
- 94.1105 Injunction proceedings for prohibited acts.
- 94.1106 Penalties.
- 94.1107 Warranty provisions.
- 94.1108 In-use compliance provisions.

APPENDIX TO PART 94

Appendix I to Part 94 -Emission-Related Engine Parameters and Specifications

Authority: 42 U.S.C. 7522, 7523, 7524, 7525, 7541, 7542, 7543, 7545, 7547, 7549, 7550 and 7601(a).

Subpart A - General Provisions for Emission Regulations for Compression-ignition Marine Engines

§94.1 Applicability.

(a) Except as noted in paragraphs (b) and (c) of this section, the provisions of this part apply to manufacturers, rebuilders, owners and operators of:

(1) Marine compression-ignition propulsion engines manufactured on or after January 1, 2004;

(2) Marine compression-ignition auxiliary engines manufactured on or after January 1, 2004; and

(3) Marine vessels manufactured on or after January 1, 2004 and which include a compression ignition engine.

(b) Notwithstanding the provision of paragraph (c) of this section, the requirements and prohibitions of this part do not apply with respect to the engines identified in paragraphs (a)(1) through (3) of this section where such engines are:

(1) Category 3 marine engines;

(2) Engines rated below 37 kW; or

(3) Engines on foreign vessels.

(c) The provisions of Subpart L of this part apply to all persons with respect to the engines identified in paragraphs (a)(1) through (3) of this section.

(d) The provisions of this part do not apply to any persons with respect to the engines not identified in paragraphs (a)(1) through (3) of this section.

(e) The prohibition specified in §94.1103(a)(6) applies to all persons with respect to recreational marine engines. Notwithstanding the provision of paragraph (c) of this section, requirements or prohibitions other than the prohibition specified in §94.1103(a)(6) of this part do not apply with respect to recreational marine engines.

§94.2 Definitions.

(a) The definitions of this section apply to this subpart. They also apply to all subparts of this part, except where noted otherwise.

(b) As used in this part, all terms not defined in this section shall have the meaning given them in the Act:

Act means the Clean Air Act as amended (42 U.S.C. 7401 et seq.).

Adjustable Parameter means any device, system, or element of design which is physically or electronically capable of being adjusted (including those which are difficult to access) and which, if adjusted, may affect emissions or engine performance during emission testing.

Administrator means the Administrator of the Environmental Protection Agency or his/her authorized representative.

Aftertreatment system or aftertreatment component or aftertreatment technology means any system or component or technology mounted downstream of the exhaust valve or exhaust port whose design function is to reduce exhaust emissions.

Applicable standard means a standard to which an engine is subject; or, where an engine is certified to another standard or FEL, applicable standard means the other standard or FEL to which the engine is certified, as allowed by §94.8. This definition does not apply to Subpart D of this part.

Auxiliary means relating to a marine engine that is not a propulsion engine.

Auxiliary emission control device (AECD) means any element of design which senses temperature, vessel speed, engine RPM, atmospheric pressure, manifold pressure or vacuum, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system (including, but not limited to injection timing); or any other feature that causes in-use emissions to be higher than those measured under test conditions.

Averaging means the exchange of emission credits among engine families within a given manufacturer's product line.

Banking means the retention of emission credits by a credit holder for use in future calendar year averaging or trading as permitted by the regulations in this part.

Base engine means a land-based engine to be marinized, as configured prior to marinization.

Blue Sky Series engine means an engine meeting the requirements of §94.7(e).

Calibration means the set of specifications, including tolerances, specific to a particular design, version, or application of a component, or components, or assembly capable of functionally describing its operation over its working range. This definition does apply to Subpart B of this part.

Category 1 means relating to a marine engine with a rated power greater than or equal to 37 kilowatts and a specific engine displacement less than 5.0 liters per cylinder.

Category 2 means relating to a marine engine with a specific engine displacement greater than or equal to 5.0 liters per cylinder but less than 20 liters per cylinder.

Category 3 means relating to a marine engine with a specific engine displacement greater than or equal to 20 liters per cylinder.

Commercial marine engine means a marine engine that is not a recreational marine engine.

Compression-ignition means relating to a type of engine with operating characteristics significantly similar to the theoretical Diesel combustion cycle. The non-use of a throttle to regulate intake air flow for controlling power during normal operation is indicative of a compression-ignition engine.

Configuration means any subclassification of an engine family which can be described on the basis of gross power, emission control system, governed speed, injector size, engine calibration, and other parameters as designated by the Administrator.

Constant-speed engine means an engine that is governed to operate only at a single rated speed.

Crankcase emissions means airborne substances emitted to the atmosphere from any portion of the engine crankcase ventilation or engine lubrication system.

Defeat device means an AECD or other control feature that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal engine operation and use, unless the AECD or other control feature has been identified by the manufacturer in the application for certification, and:

(1) Such conditions are substantially represented by the portion of the applicable test cycle of §94.105 during which the applicable emission rates are measured;

(2) The need for the AECD or other control feature is justified in terms of protecting the engine or vessel against damage or accident; or

(3) The AECD or other control feature does not go beyond the requirements of engine starting.

Deterioration factor means the difference between exhaust emissions at the end of useful life and exhaust emissions at the low hour test point expressed as either: the ratio of exhaust emissions at the end of useful life to exhaust emissions at the low mileage test point (for multiplicative deterioration factors); or the difference between exhaust emissions at the end of useful life and exhaust emissions at the low hour test point (for additive deterioration factors).

Diesel fuel means any fuel suitable for use in diesel engines which is commonly or commercially known or sold as diesel fuel.

Dress means to modify a land-based engine for use in a marine vessel, where such modification would not reasonably be expected to potentially affect emissions. This definition does not apply for engines that are not certified to Tier 2 or later standards.

Dresser means any entity that dresses an engine.

Emission control system means those devices, systems or elements of design which control or reduce the emission of substances from an engine. This includes, but is not limited to, mechanical and electronic components and controls, and computer software.

Emission credits means the amount of emission reduction or exceedance, by an engine family, below or above the emission standard, respectively, as calculated under Subpart D of this part. Emission reductions below the standard are considered as "positive credits," while emission exceedances above the standard are considered as "negative credits." In addition, "projected credits" refer to emission credits based on the

projected applicable production/sales volume of the engine family. "Reserved credits" are emission credits generated within a calendar year waiting to be reported to EPA at the end of the calendar year. "Actual credits" refer to emission credits based on actual applicable production/sales volume as contained in the end-of-year reports submitted to EPA.

Emission-data engine means an engine which is tested for purposes of emission certification or production line testing.

Emission-related defect means a defect in design, materials, or workmanship in a device, system, or assembly which affects any parameter or specification enumerated in Appendix I of this part.

Emission-related maintenance means that maintenance which substantially affects emissions or which is likely to affect the deterioration of the engine or vessel with respect to emissions.

Engine family means a group of engine configurations that are expected to have similar emission characteristics throughout the useful lives of the engines (see §94.204), and that are (or were) covered (or requested to be covered) by a specific certificate of conformity.

Engineering analysis means a summary of scientific and/or engineering principles and facts that support a conclusion made by a manufacturer, with respect to compliance with the provisions of this part.

EPA Enforcement Officer means any officer or employee of the Environmental Protection Agency so designated in writing by the Administrator or his/her designee.

Exhaust emissions means substances (i.e., gases and particles) emitted to the atmosphere from any opening downstream from the exhaust port or exhaust valve of an engine.

Exhaust gas recirculation means an emission control technology that reduces emissions by routing gases that had been exhausted from the combustion chamber(s) back into the engine to be mixed with incoming air prior to or during combustion. The use of valve timing to increase the amount of residual exhaust gas in the combustion chamber(s) that is mixed with incoming air prior to or during combustion is not considered to be exhaust gas recirculation for the purposes of this part.

Family Emission Limit (FEL) means an emission level declared by the certifying manufacturer to serve in lieu of an otherwise applicable emission standard for certification and compliance purposes in the averaging, banking and trading program. FELs are expressed to the same number of decimal places as the applicable emission standard.

Foreign trade vessel means a vessel that spends less than 25 percent of its operating time within 320 nautical kilometers of U.S. territory, and which does not operate solely between the United States, Canada, Mexico, Bermuda, or the Bahamas.

Foreign vessel means a vessel of foreign registry or a vessel operated under the authority of a country other than the United States

Fuel system means the combination of fuel tank(s), fuel pump(s), fuel lines and filters, pressure regulator(s), and fuel injection components, fuel system vents, and any other component involved in the delivery of fuel to the engine.

Green Engine Factor means a factor that is applied to emission measurements from an engine that has had little or no service accumulation. The Green Engine Factor adjusts

emission measurements to be equivalent to emission measurements from an engine that has had approximately 300 hours of use.

Identification number means a specification (for example, model number/serial number combination) which allows a particular engine to be distinguished from other similar engines.

IMO NO_x Technical Code means the "Technical Code on Control of Emission of Nitrogen Oxides From Marine Diesel Engines", as adopted on September 26, 1997 by the International Maritime Organization in conference Resolution 2, Conference of the Parties to the International Convention for the Prevention of Pollution from Ship, 1973 as modified by the protocol of 1978 relating thereto (reported in MP/Conf. 3/35, 22 October 1997). The IMO NO_x Technical Code has been incorporated by reference at §94.5 of this part.

Importer means an entity or person who imports engines from a foreign country into the United States (including its territories).

Intermediate Speed means peak torque speed if peak torque speed occurs from 60 to 75 percent of rated speed. If peak torque speed is less than 60 percent of rated speed, intermediate speed means 60 percent of rated speed. If peak torque speed is greater than 75 percent of rated speed, intermediate speed means 75 percent of rated speed.

Low hour engine means an engine during the interval between the time that normal assembly operations and adjustments are completed and the time that 300 additional operating hours have been accumulated (including hours accumulated during emission testing, if performed).

Malfunction means a condition in which the operation of a component in an engine occurs in a manner other than that specified by the certifying manufacturer (e.g., as specified in the application for certification); or the operation of engine in that condition.

Manufacturer means any person engaged in the manufacturing or assembling of new engines or importing such engines for resale, or who acts for and is under the control of any such person in connection with the distribution of such engines. The term manufacturer includes post-manufacturer marinizers, but does not include any dealer with respect to new engines received by such person in commerce.

Marine means relating to a vessel or an engine that is installed or intended to be installed on a vessel.

Marine engine means a diesel engine that is installed or intended to be installed on a vessel. This definition does not include portable auxiliary engines for which the fueling, cooling and exhaust systems are not integral parts of the vessel.

Marine vessel has the meaning specified in the General Provisions of the United States Code, 1 U.S.C. 3.

Maximum rated power means the maximum brake power output of an engine.

Method of aspiration means the method whereby air for fuel combustion enters the engine (e.g., naturally aspirated or turbocharged).

Model year means the manufacturer's annual new model production period which includes January 1 of the calendar year, ends no later than December 31 of the calendar year, and does not begin earlier than January 2 of the previous calendar year. Where a

manufacturer has no annual new model production period, model year means calendar year.

New marine engine means:

(1) (i) An engine, the equitable or legal title to which has never been transferred to an ultimate purchaser;

(ii) An engine placed in a vessel, the equitable or legal title to which has never been transferred to an ultimate purchaser; or

(iii) An engine that has not been placed into service on a vessel.

(2) Where the equitable or legal title to an engine or vessel is not transferred to an ultimate purchaser prior to its being placed into service, the engine ceases to be new after it is placed into service.

(3) With respect to imported engines, the term "new marine engine" means a engine that is not covered by a certificate of conformity under this part at the time of importation, and that was manufactured after the compliance date of the emission standards in this part which is applicable to such engine (or which would be applicable to such engine had it been manufactured for importation into the United States).

New vessel means a vessel, the equitable or legal title to which has never been transferred to an ultimate purchaser. Where the equitable or legal title to a vessel is not transferred to an ultimate purchaser prior to its being placed into service, the vessel ceases to be new when it is placed into service.

Nonconforming marine engine means a marine engine which is not covered by a certificate of conformity prior to importation or being offered for importation (or for which such coverage has not been adequately demonstrated to EPA); or a marine engine which was originally covered by a certificate of conformity, but which is not in a certified configuration, or otherwise does not comply with the conditions of that certificate of conformity. (Note: Domestic marine engines which are not covered by a certificate of conformity prior to their introduction into U.S. commerce are considered to be noncomplying marine engines.)

Oxides of nitrogen means nitric oxide and nitrogen dioxide. Oxides of nitrogen are expressed quantitatively as if the nitric oxide were in the form of nitrogen dioxide (oxides of nitrogen are assumed to have a molecular weight equivalent to nitrogen dioxide).

Post-manufacture marinizer means a person who produces a marine engine by substantially modifying an engine, whether certified or uncertified, complete or partially complete, and is not controlled by the manufacturer of the base engine or by an entity that also controls the manufacturer of the base engine. For the purpose of this definition, "substantially modify" means changing an Tier 2 or later engine in a way that could reasonably be expected to potentially change engine emission characteristics, or changing an uncertified or Tier 1 in any way. Vessel manufacturers that substantially modify engines are post-manufacturer marinizers.

Power assembly means the components of an engine in which combustion of fuel occurs, and consists of the cylinder, piston and piston rings, valves and ports for admission of charge air and discharge of exhaust gases, fuel injection components and controls, cylinder head and associated components.

Presentation of credentials means the display of the document designating a person as an EPA enforcement officer.

Primary fuel means that type of fuel (e.g., petroleum distillate diesel fuel) that is expected to be consumed in the greatest quantity (volume basis) when the engine is operated in use.

Propulsion means relating to an engine that moves a vessel through the water or directs the movement of a vessel.

Rated power means the maximum brakepower output of an engine.

Rated speed is the maximum test speed defined in §94.107.

Rebuilder means any person that rebuilds or remanufactures an engine.

Recreational marine engine means a propulsion marine engine that is intended by the manufacturer to be installed on a recreational vessel, and which is permanently labeled as follows: " THIS RECREATIONAL ENGINE DOES NOT COMPLY WITH FEDERAL MARINE ENGINE EMISSION REQUIREMENTS FOR NONRECREATIONAL VESSELS. INSTALLATION OF THIS ENGINE IN ANY NONRECREATIONAL VESSEL IS A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY."

Recreational vessel means a vessel being manufactured or operated primarily for pleasure, or being leased, rented or chartered to another for the latter's pleasure (except where the vessel is leased, rented, or chartered for more than six passengers). Vessels for hire which can carry more than six passengers, whether or not they ever actually do, are not recreational vessels. For this definition the term "operated primarily for pleasure," does not include vessels used solely for competition or used at any time in any other way to generate income or revenue in any way not associated with the hiring out of the vessel to other people for their pleasure.

Service life means the total life of an engine. Service life begins when the engine is originally manufactured and continues until the engine is permanently removed from service.

Small manufacturer means a manufacturer that is classified as a small business by the Small Business Administration.

Specific emissions means emissions expressed on the basis of observed brake power, using units of g/kW-hr. Observed brake power measurement includes accessories on the engine if these accessories are required for running an emission test (except for the cooling fan). When it is not possible to test the engine in the gross conditions, for example if the engine and transmission form a single integral unit, the engine may be tested in the net condition. Power corrections from net to gross conditions will be allowed with prior approval of the Administrator.

Specified by a certificate of conformity or specified in a certificate of conformity means stated or otherwise specified in a certificate of conformity or an approved application for certification.

Test engine means an engine in a test sample.

Test sample means the collection of engines or vessels selected from the population of an engine family for emission testing.

Tier 2 means relating to an engine subject to the Tier 2 emission standards listed in §94.8.

Tier 3 means relating to an engine subject to the Tier 3 emission standards listed in §94.8.

Total Hydrocarbon Equivalent means the sum of the carbon mass contributions of non-oxygenated hydrocarbons, alcohols and aldehydes, or other organic compounds that are measured separately as contained in a gas sample, expressed as petroleum-fueled engine hydrocarbons. The hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1.

Trading means the exchange of engine emission credits between credit holders.

Ultimate Purchaser means, with respect to any new engine or vessel, the first person who in good faith purchases such new engine or vessel for purposes other than resale.

United States. United States includes the customs territory of the United States as defined in 19 U.S.C. 1202, and the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

U.S.-directed production volume means the number of marine engine units, subject to this part, produced by a manufacturer for which the manufacturer has reasonable assurance that sale was or will be made to ultimate purchasers in the United States.

Useful life means the period during which an engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as hours of use and years. It is the period during which a new engine is required to comply with all applicable emission standards. (Note: §94.9(a) specifies minimum requirements for useful life values.)

Voluntary emission recall means a repair, adjustment, or modification program voluntarily initiated and conducted by a manufacturer to remedy any emission-related defect for which notification of engine or vessel owners has been provided.

§94.3 Abbreviations.

The abbreviations of this section apply to all subparts of this part and have the following meanings:

AECD	-	Auxiliary emission control device
API	-	American Petroleum Institute
ASTM-		American Society for Testing and Materials
°C	-	Degrees celsius
CI	-	Compression ignition
CO-		Carbon monoxide
CO ₂	-	Carbon dioxide
disp.	-	volumetric displacement of an engine cylinder
EGR	-	Exhaust gas recirculation
EP	-	End point
EPA	-	Environmental Protection Agency
FEL	-	Family emission limit
ft	-	foot or feet
FTP	-	Federal Test Procedure
g	-	gram(s)
g/kW-hr	-	Grams per kilowatt hour
gal	-	U.S. gallon
h	-	hour(s)
HC-		hydrocarbon
Hg	-	Mercury
hp	-	horsepower
ICI-		Independent Commercial Importer
in	-	inch(es)
K	-	Kelvin
kg	-	kilogram(s)
km	-	kilometer(s)
kPa	-	kilopascal(s)
kW-		kilowatt
m	-	meter(s)
max	-	maximum
mg	-	milligram(s)
min	-	minute
ml	-	milliliter(s)
mm	-	millimeter
NIST	-	National Institute for Standards and Testing
NMHC-		Non-methane hydrocarbons
NTIS	-	National Technical Information Service
NO-		nitric oxide
NO ₂	-	nitrogen dioxide

NO_x - oxides of nitrogen
No.- number
O₂ - oxygen
pct - percent
PM- particulate matter
PMM - post-manufacturer marinizer
ppm - parts per million by volume
ppmC - parts per million, carbon
rpm - revolutions per minute
s - second(s)
SAE - Society of Automotive Engineers
SEA - Selective Enforcement Auditing
SI - International system of units (i.e., metric)
THC - Total hydrocarbon
THCE - Total hydrocarbon equivalent
U.S. - United States
U.S.C. - United States Code
vs - versus
W - watt(s)
wt - weight

§94.4 Treatment of confidential information.

(a) Any manufacturer may assert that some or all of the information submitted pursuant to this part is entitled to confidential treatment as provided by 40 CFR Part 2, Subpart B.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to EPA.

(c) To assert that information submitted pursuant to this part is confidential, a person or manufacturer must indicate clearly the items of information claimed confidential by marking, circling, bracketing, stamping, or otherwise specifying the confidential information. Furthermore, EPA requests, but does not require, that the submitter also provide a second copy of its submittal from which all confidential information has been deleted. If a need arises to publicly release nonconfidential information, EPA will assume that the submitter has accurately deleted the confidential information from this second copy.

(d) If a claim is made that some or all of the information submitted pursuant to this part is entitled to confidential treatment, the information covered by that confidentiality claim will be disclosed by EPA only to the extent and by means of the procedures set forth in 40 CFR Part 2, Subpart B.

(e) Information provided without a claim of confidentiality at the time of submission may be made available to the public by EPA without further notice to the submitter, in accordance with 40 CFR 2.204(c)(2)(i)(A).

§94.5 Reference materials.

(a) The documents in paragraph (b) of this section have been incorporated by reference. The incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at U.S. EPA, OAR, 401 M Street, SW., Washington, DC 20460, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(b) The following paragraphs and tables set forth the material that has been incorporated by reference in this part:

(1) ASTM material. The following table sets forth material from the American Society for Testing and Materials that has been incorporated by reference. The first column lists the number and name of the material. The second column lists the section(s) of the part, other than this section, in which the matter is referenced. The second column is presented for information only and may not be all-inclusive. More recent versions of these standards may be used with advance approval of the Administrator. Copies of these materials may be obtained from American Society for Testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428. The table follows:

Document number and name	40 CFR part 94 reference
ASTM D86-97: “Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure”	§94.108 to Subpart D
ASTM D93-97: “Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester”	§94.108 to Subpart D
ASTM D129-95: “Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)”	§94.108 A to Subpart D
ASTM D287-92: “Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products” (Hydrometer Method)	§94.108 to Subpart D
ASTM D445-97: “Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)”	§94.108 to Subpart D
ASTM D613-95: “Standard Test Method for Cetane Number of Diesel Fuel Oil”	§94.108 to Subpart D
ASTM D1319-98: “Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption”	§94.108 to Subpart D
ASTM D2622-98: “Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry”	§94.108 to Subpart D
ASTM D5186-96: "Standard Test Method for Determination of the Aromatic Content and Polynuclear Aromatic Content of Diesel Fuels and Aviation Turbine Fuels By Supercritical Fluid Chromatography"	§94.108 to Subpart D
ASTM E29-93a: “Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications”	§§94.9, 94.305, 94.509

(2) IMO material. The following table sets forth material from the International Maritime Organization that has been incorporated by reference. The first column lists the name of the material. The second column lists the section(s) of the part, other than this section, in which the matter is referenced. The second column is presented for information only and may not be all-inclusive. More recent versions of these standards may be used with advance approval of the Administrator. Copies of these materials may be obtained from the International Maritime Organization, 4 Albert Embankment, London SE1 7SR,U.K.. The table follows:

Document number and name	40 CFR part 94 reference
Technical Code on Control of Emission of Nitrogen Oxides From Marine Diesel Engines, as adopted on September 26, 1997 by the International Maritime Organization in conference Resolution 2, Conference of the Parties to the International Convention for the Prevention of Pollution from Ship, 1973 as modified by the protocol of 1978 relating thereto (reported in MP/Conf. 3/35, 22 October 1997)	§ 94.105

§94.6 Regulatory structure.

This section provides an overview of the regulatory structure of this part.

- (a) The regulations of this Part 94 are intended to control emissions from in-use marine engines.
- (b) The engines for which the regulations of this part (i.e., 40 CFR part 94) apply are specified by § 94.1, and by the definitions of § 94.2. The point at which an engine or vessel becomes subject to the regulations of this part is determined by the definitions of new marine engine and new marine vessel in § 94.2. Subpart J of this part contains provisions exempting certain engines and vessels from the emission standards in this part under special circumstances.
- (c) To comply with the requirements of this part, a manufacturer must demonstrate to EPA that the engine meets the applicable standards of §§ 94.7 and 94.8, and all other requirements of this part. The requirements of this certification process are described in Subparts C and D of this part.
- (d) Subpart B of this part specifies procedures and equipment to be used for conducting emission tests for the purpose of the regulations of this part.
- (e) Subparts E, F, and H of this part specify requirements for manufacturers after certification; that is during production and use of the engines.
- (f) Subpart I of this part contains requirements applicable to the importation of marine engines covered by the provisions of this part.
- (g) Subpart L of this part describes prohibited acts and contains other enforcement provisions relating to marine engines and vessels covered by the provisions of this part.
- (h) Unless specified otherwise, the provisions of this part apply to all marine engines

and vessels subject to the emission standards of this part.

§ 94.7 General standards and requirements.

(a) Marine engines and vessels may not be equipped with a defeat device.

(b) An engine may not be equipped with an emission control system for the purpose of complying with emission standards if such a system will cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function.

(c) An engine with an emission control system may not emit any noxious or toxic substance which would not be emitted in the operation of the engine in the absence of such a system, except as specifically permitted by regulation.

(d) All engines subject to the emission standards of this part shall be equipped with a connection in the engine exhaust system that is located downstream of the engine and before any point at which the exhaust contacts water (or any other cooling/scrubbing medium) for the temporary attachment of gaseous and/or particulate emission sampling equipment. This connection shall be internally threaded with standard pipe threads of a size not larger than one-half inch, and shall be closed by a pipe-plug when not in use.

(e) All engines subject to the emission standards of this part shall broadcast on engine's controller area networks actual engine percent torque and actual engine speed.

§94.8 Exhaust emission standards.

(a) Exhaust emissions from marine compression-ignition engines shall not exceed the applicable exhaust emission standards contained in Table A-1 as follows:

Table A-1.– Primary Exhaust Emission Standards (g/kW-hr)

Subcategory liters/cylinder	Tier	Model Year*	THC+NO _x g/kW-hr	CO g/kW-hr	PM g/kW-hr
power ≥ 37 kW and disp. < 0.9	Tier 2	2004	7.2	5.0	0.40
	Tier 3	2008	4.0	5.0	--
0.9 ≤ disp. < 1.2	Tier 2	2004	7.2	5.0	0.30
	Tier 3	2008	4.0	5.0	--
1.2 ≤ disp. < 1.5	Tier 2	2004	7.2	3.5	0.20
	Tier 3	2008	4.0	3.5	--
1.5 ≤ disp. < 2.0	Tier 2	2004	7.2	3.5	0.20
	Tier 3	2008	4.0	3.5	--
2.0 ≤ disp. < 2.5	Tier 2	2004	7.2	3.5	0.20
	Tier 3	2008	4.0	3.5	--
2.5 ≤ disp. < 5.0	Tier 2	2006	7.2	3.5	0.20
	Tier 3	2010	5.0	3.5	--
5.0 ≤ disp. < 20	Tier 2	2006	7.2	2.0	0.27
	Tier 3	2010	5.0	2.0	--

* The model years listed indicate the model years for which the specified tier of standards take effect.

(b) Exhaust emissions of oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter (and smoke, as applicable) shall be measured using the procedures set forth in subpart B of this part.

(c) In lieu of the NO_x standards, THC+NO_x standards, and PM standards specified in paragraph (a) of this section, manufacturers may elect to include engine families in the averaging, banking, and trading program, the provisions of which are specified in subpart D of this part. The manufacturer shall then set a family emission limit (FEL) which will serve as the standard for that engine family.

(d)(1) Naturally aspirated engines to which this subpart is applicable shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission

measurements.

(2) For engines using turbochargers, pumps, blowers, or superchargers for air induction, if the engine discharges crankcase emissions into the ambient atmosphere in use, these crankcase emissions shall be included in all exhaust emission measurements.

(e) Exhaust emissions from engines subject to the standards (or FELs) in paragraph (a), (c), or (f) of this section shall not exceed 1.25 times the applicable standards (or FELs) when tested in accordance with the supplemental test procedures specified in §94.106.

(f) The following paragraphs define the requirements for low-emitting Blue Sky Series engines.

(1) Voluntary standards. Engines may be designated “Blue Sky Series” engines through the 2007 model year by meeting the voluntary standards listed in Table A-2, which apply to all certification and in-use testing.

Table A-2.—Voluntary Emission Standards (g/kW-hr)

Rated Brake Power (kW)	THC+NO _x	PM
power ≥ 37 kW disp.<0.9	4.0	0.24
0.9≤disp.<1.2	4.0	0.18
1.2≤disp.<2.5	4.0	0.12
2.5≤disp.<5.0	5.0	0.12
5.0≤disp.<20	5.0	0.16

(2) *Additional standards.* Blue Sky Series engines are subject to all provisions that would otherwise apply under this part.

(3) *Test procedures.* Manufacturers may use an alternate procedure to demonstrate the desired level of emission control if approved in advance by the Administrator.

(g) Standards for alternative fuels. The standards described in this section apply to compression-ignition engines, irrespective of fuel, with the following two exceptions:

(1) Engines fueled with natural gas shall comply with NMHC+NO_x standards that are numerically equivalent to the THC+NO_x described in paragraph (a) of this section; and

(2) Engines fueled with alcohol fuel shall comply with THCE+NO_x standards that are numerically equivalent to the THC+NO_x described in paragraph (a) of this section

§94.9 Compliance with emission standards.

(a) The general standards and requirements in §94.7 and the emission standards in §94.8 apply to each new engine throughout its useful life period. The useful life is specified as hours and years, and ends when either of the values (hours or years) is exceeded.

(1) The minimum useful life in terms of hours is equal to 10,000 hours for Category 1 and 20,000 hours for Category 2. The minimum useful life in terms of years is 10 years.

(2) The manufacturer shall specify a longer useful life if the engine is designed to remain in service longer than the applicable minimum useful life. A manufacturer's recommended time to remanufacture/rebuild which is longer than the minimum useful life is one indicator of a longer design life.

(b) Certification is the process by which manufacturers apply for and obtain certificates of conformity from EPA, which allows the manufacturer to introduce into commerce new marine engines for sale or use in the U.S.

(1) Compliance with the applicable emission standards by an engine family shall be demonstrated by the certifying manufacturer before a certificate of conformity may be issued under §94.208. Manufacturers shall demonstrate compliance using emission data, measured using the procedures specified in Subpart B of this part, from a low hour engine. A development engine that is equivalent in design to the marine engines being certified may be used for Category 2 certification.

(2) The emission values to compare with the standards shall be the emission values of a low hour engine, or a development engine, adjusted by the deterioration factors developed in accordance with the provisions of §94.219. Before any emission value is compared with the standard, it shall be rounded, in accordance with ASTM E 29-93a (incorporated by reference at §94.5), to the same number of significant figures as contained in the applicable standard.

(c) Upon request by the manufacturer, the Administrator may limit the applicability of exhaust emission requirements of §94.8(e) as necessary for safety or to otherwise protect the engine.

§94.10 Warranty period.

Warranties imposed by § 94.1107 shall apply for a period of hours equal to 50 percent of the useful life in hours or a period of years equal to 50 percent of the useful life in years, whichever comes first.

§94.11 Requirements for rebuilding certified engines.

(a) The provisions of this section apply with respect to engines subject to the standards prescribed in §94.8 and are applicable to the process of engine rebuilding (or rebuilding a portion of an engine or engine system). The process of engine rebuilding generally includes disassembly, replacement of multiple parts due to wear, and reassembly, and may also include the removal of the engine from the vessel and other acts associated with rebuilding an engine.

(b) When rebuilding an engine, portions of an engine, or an engine system, there must be a reasonable technical basis for knowing that the resultant engine is equivalent, from an emissions standpoint, to a certified configuration (i.e., tolerances, calibrations, specifications), and the model year(s) of the resulting engine configuration must be identified. A reasonable basis would exist if:

(1) Parts installed, whether the parts are new, used, or rebuilt, are such that a person familiar with the design and function of motor vehicle engines would reasonably believe that the parts perform the same function with respect to emission control as the original parts; and

(2) Any parameter adjustment or design element change is made only:

(i) In accordance with the original engine manufacturer's instructions; or

(ii) Where data or other reasonable technical basis exists that such parameter adjustment or design element change, when performed on the engine or similar engines, is not expected to adversely affect in-use emissions.

(c) When an engine is being rebuilt and remains installed or is reinstalled in the same vessel, it must be rebuilt to a configuration of the same or later model year as the original engine. When an engine is being replaced, the replacement engine must be an engine of (or rebuilt to) a certified configuration that is equivalent, from an emissions standpoint, to the engine being replaced.

(d) At time of rebuild, emission-related codes or signals from on-board monitoring systems may not be erased or reset without diagnosing and responding appropriately to the diagnostic codes, regardless of whether the systems are installed to satisfy requirements in §94.211 or for other reasons and regardless of form or interface. Diagnostic systems must be free of all such codes when the rebuilt engine is returned to service. Such signals may not be rendered inoperative during the rebuilding process.

(e) When conducting a rebuild without removing the engine from the vessel, or during the installation of a rebuilt engine, all critical emission-related components listed in Appendix I of this part not otherwise addressed by paragraphs (b) through (d) of this section must be checked and cleaned, adjusted, repaired, or replaced as necessary, following manufacturer recommended practices.

(f) Records shall be kept by parties conducting activities included in paragraphs (b) through (e) of this section. The records shall include at minimum the hours of operation at the time of rebuild, a listing of work performed on the engine, and emission-related control components including a listing of parts and components used, engine parameter adjustments, emission-related codes or signals responded to and reset, and work performed under paragraph (e) of this section.

(1) Parties may keep records in whatever format or system they choose as long as the

records are understandable to an EPA enforcement officer or can be otherwise provided to an EPA enforcement officer in an understandable format when requested.

(2) Parties are not required to keep records of information that is not reasonably available through normal business practices including information on activities not conducted by themselves or information that they cannot reasonably access.

(3) Parties may keep records of their rebuilding practices for an engine family rather than on each individual engine rebuilt in cases where those rebuild practices are followed routinely.

(4) Records must be kept for a minimum of two years after the engine is rebuilt.

Subpart B - Test Procedures

§ 94.101 Applicability.

Provisions of this subpart apply for testing performed by the Administrator and for testing performed by manufacturers.

§ 94.102 General provisions.

(a) The test procedures specified in this part for marine engine testing are intended to produce emission measurements that are equivalent to emission measurements that would result from emission tests performed during in-use operation using the same engine configuration installed in a vessel.

(b) Test procedures otherwise allowed by the provisions of this subpart shall not be used where such procedures are not consistent with good engineering practice and the regulatory goal specified in paragraph (a) of this section.

(c) Alternate test procedures may be used if shown to yield equivalent results, and if approved in advance by the Administrator.

§ 94.103 Test procedures for Category 1 marine engines.

(a) Gaseous and particulate emissions shall be measured using the test procedures specified in 40 CFR Part 89, except as otherwise specified in this subpart.

(b) The Administrator may specify changes to the provisions of paragraph (a) of this section that are necessary to comply with the general provisions of § 94.102.

§ 94.104 Test procedures for Category 2 marine engines.

(a) Gaseous and particulate emissions shall be measured using the test procedures specified in 40 CFR Part 92, except as otherwise specified in this subpart.

(b)(1) The requirements of 40 CFR Part 92 related to charge air temperatures, engine speed and load, and engine air inlet restriction pressures do not apply for marine engines.

(2) For marine engine testing, charge air temperatures, engine speed and load, and engine air inlet restriction pressures shall be representative of typical in-use marine engine conditions.

(c) The Administrator may specify changes to the provisions of paragraph (a) of this section that are necessary to comply with the general provisions of § 94.102.

§ 94.105 Test cycles.

(a) For the purpose of determining compliance with the emission standards of §94.8 (a), (c), (f), and (g), propulsion engines that are used with (or intended to be used with) fixed-pitch propellers shall be tested using the test cycle described in Table B-1, which follows:

Table B-1.—Duty Cycle for Propulsion Engines: Fixed-Pitch Propeller

Mode Number	Engine Speed ⁽¹⁾ (percent of rated speed)	Observed Power ⁽²⁾ (percent of max. observed)	Minimum Time in mode (minutes)	Weighting Factors
1	100	100	5.0	0.20
2	91	75	5.0	0.50
3	80	50	5.0	0.15
4	63	25	5.0	0.15

(1) Engine speed: ± 2 percent of point.

(2) Power: Observed power with maximum fueling rate for operation at 100 percent point. Other points: ±2 percent of engine maximum value.

(b) For the purpose of determining compliance with the emission standards of §94.8 (a), (c), (f), and (g), constant-speed propulsion engines that are used with (or intended to be used with) variable-pitch propellers shall be tested using the test cycle described in Table B-2, which follows:

Table B-2.—Duty Cycle for Propulsion Engines: Variable-Pitch Propeller

Mode Number	Engine Speed ⁽¹⁾ (percent of rated speed)	Observed Power ⁽²⁾ (percent of max. observed)	Minimum Time in mode (minutes)	Weighting Factors
1	100	100	5.0	0.20
2	100	75	5.0	0.50
3	100	50	5.0	0.15
4	100	25	5.0	0.15

(1) Engine speed: ± 2 percent of point.

(2) Power: Observed power with maximum fueling rate for operation at 100 percent point. Other points: ±2 percent of engine maximum value.

(c) For the purpose of determining compliance with the emission standards of §94.8 (a), (c), (f), and (g), auxiliary engines shall be tested using the applicable test cycle described in 40 CFR Part 89.

§ 94.106 Supplemental test procedures.

This section describes the test procedures for supplemental testing conducted to

determine compliance with the exhaust emission requirements of §94.8(e). In general, the supplemental test procedures are the same as those otherwise specified by this subpart, except that they cover any speeds, loads, ambient conditions, and operating parameters that may be experienced in use. The test procedures specified by other sections in this subpart also apply to these tests, except as specified in this section.

(a) Notwithstanding other provisions of this subpart, testing conducted to determine compliance with the exhaust emission requirements of §94.8(e) may be conducted:

(1) At any speed and load (or combination of speeds and loads) within the applicable Not To Exceed Zone specified in paragraph (b) of this section;

(2) Without correction, at any ambient:

(i) Air temperature between 13°C and 35°C;

(ii) Water temperature (or equivalent) between 5°C and 32°C;

(iii) Humidity between 7.1 and 10.7 grams of moisture per kilogram of dry air; and

(3) With any continuous sampling period not less than 30 seconds in duration.

(b) The Not to Exceed Zone for marine propulsion engines that are used with (or intended to be used with):

(1) Fixed-pitch propellers as defined in Figure B-1;

(2) Variable-pitch propellers defined as any load greater than or equal to 25 percent of rated power, and any speed at which the engine operates in use.

(c) (1) Upon request by the manufacturer, the Administrator may specify a narrower Not to Exceed Zone for an engine family at the time of certification, provided that the narrower Not to Exceed Zone includes all speeds and loads at which the engines are expected to normally operate in use.

(2) The Administrator may specify, at the time of certification, a broader Not to Exceed Zone for an engine family containing engines used in planing vessels, provided that the broader Not to Exceed Zone includes only speeds and loads at which the engines are expected to normally operate in use.

(3) The Administrator may specify, at the time of certification, a broader Not to Exceed Zone for an engine family containing engines used in vessels with variable-pitch propellers, provided that the broader Not to Exceed Zone includes only speeds and loads at which the engines are expected to normally operate in use.

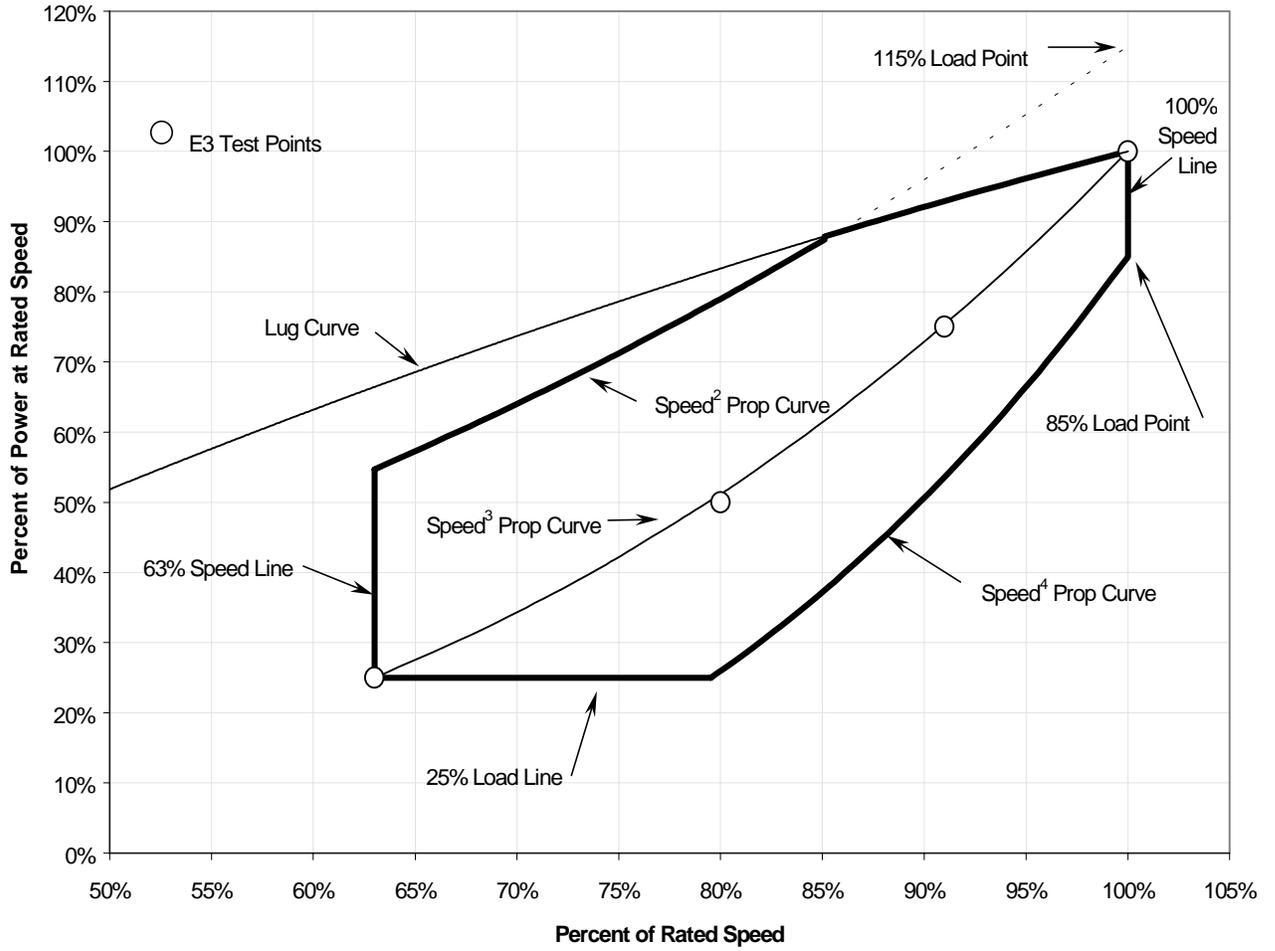
(d) Testing of engines over a transient test cycle shall be conducted using the dilute emission sampling and analytical procedures specified for diesel engines in 40 CFR Part 86, Subpart N.

(e) Notwithstanding other provisions of this subpart, testing conducted to determine compliance with the exhaust emission requirements of §94.8(e) may be conducted at any ambient air temperature or humidity outside the ranges specified in §94.106(a)(2), provided that emission measurements are corrected to be equivalent to measurements within the ranges specified in §94.106(a)(2). Correction of emission measurements made in accordance with paragraph (a)(3) of this section shall be made in accordance with good engineering practice. The measurements shall be corrected to be within the range using the minimum possible correction.

(f) Testing conducted under this section may include transient speed and load operation. Engine testing may not include transient operation that cannot be replicated by similar engines as installed on actual vessels in use.

(g) Testing conducted under this section may not include engine starting.

Figure B-1



§94.107 Determination of rated speed.

This section specifies how to determine rated speed from a lug curve. This rated speed is the maximum test speed used in §§94.105 and 94.106.

(a) Generation of lug curve. Prior to beginning emission testing, generate maximum measured brakepower versus engine speed data points using the applicable method specified in 40 CFR 86.1332. These data points form the lug curve.

(b) Normalization of lug curve. (1) Identify the point (power and speed) on the lug curve at which maximum power occurs.

(2) Normalize the power values of the lug curve by dividing them by the maximum power value identified in paragraph (b)(1) of this section, and multiplying the resulting values by 100.

(3) Normalize the engine speed values of the lug curve by dividing them by the speed at which maximum power occurs, which is identified in paragraph (b) (1) of this section, and multiplying the resulting values by 100.

(4) Maximum engine power is located on the normalized lug curve at 100 percent power and 100 percent speed.

(c) Determination of rated speed. Calculate the rated speed from the speedfactor analysis described in this paragraph (c).

(1) For a given combination of engine power and speed (i.e., a given power/speed point), the speedfactor is the normalized distance to the power/speed point from the zero power, zero speed point. The value of the speedfactor is defined as:

$$Speedfactor = \sqrt{(power)^2 + (speed)^2}$$

(2) Calculate speedfactors for the power/speed data points on the lug curve, and determine the maximum value.

(3) Rated speed is the speed at which the maximum value for the speedfactor occurs.

§ 94.108 Test fuels.

(a) *Petroleum diesel test fuel.* (1) The diesel fuels for testing marine engines designed to operate on petroleum diesel fuel shall be clean and bright, with pour and cloud points adequate for operability. The diesel fuel may contain nonmetallic additives as follows: cetane improver, metal deactivator, antioxidant, dehazer, antirust, pour depressant, dye, dispersant, and biocide. The diesel fuel shall also meet the specifications (as determined using methods incorporated by reference at §94.5) in Table B-3 of this section, or substantially equivalent specifications approved by the Administrator, as follows:

Table B-3.—Federal Test Fuel Specifications

Item	Procedure (ASTM) ¹	Value (Type 2-D)
Cetane	D613-95	40-48
Distillation Range:		
IBP, °C	D86-97	171-204
10% point, °C	D86-97	204-238
50% point, °C	D86-97	243-282
90% point, °C	D86-97	293-332
EP, °C	D86-97	321-366
Gravity, API	D287-92	32-37
Total Sulfur, % mass	D129-95 or D2622-98	0.03 - 0.80
Hydrocarbon composition:		
Aromatics, % vol.	D1319-98 or D5186-96	10 ⁽²⁾
Paraffins, Naphthenes, Olefins	D1319-98	⁽³⁾
Flashpoint, °C (minimum)	D93-97	54
Viscosity @ 38°C, Centistokes	D445-97	2.0-3.2

¹All ASTM procedures in this table have been incorporated by reference. See §94.6.

²Minimum.

³Remainder.

(2) Other diesel fuels may be used for testing provided:

(i) They are commercially available; and

(ii) Information, acceptable to the Administrator, is provided to show that only the designated fuel would be used in service; and

(iii) Use of a fuel listed under paragraph (a)(1) of this section would have a detrimental effect on emissions or durability; and

(iv) Written approval from the Administrator of the fuel specifications is provided prior to the start of testing.

(3) The specification of the fuel to be used under paragraphs (a)(1), and (a)(2) of this section shall be reported in the application for certification.

(b) Other fuel types. (1) For engines which are designed to be capable of using a type of fuel (or mixed fuel) other than petroleum diesel fuel (e.g., natural gas or methanol), and which are expected to use that type of fuel (or mixed fuel) in service, a commercially available fuel of that type shall be used for exhaust emission testing. The Administrator shall determine the specifications of the fuel to be used for testing, based on the engine design, the specifications of commercially available fuels, and the recommendation of the manufacturer.

(2) The specification of the fuel to be used under paragraph (b)(1) of this section shall be reported in the application for certification.

(c)(1) Particulate emission measurements from engines without exhaust aftertreatment obtained using a diesel fuel containing more than 0.40 weight percent sulfur may be adjusted to a sulfur content of 0.40 weight percent.

(2) Adjustments to the particulate measurement shall be made using the following equation:

$$PM_{adj} = PM - [BSFC * 0.0917 * (FSF - 0.0040)]$$

Where:

PM_{adj} = adjusted measured PM level [g/Kw-hr]

PM = measured weighted PM level [g/Kw-hr]

$BSFC$ = measured brake specific fuel consumption [G/Kw-hr]

FSF = fuel sulfur weight fraction

Subpart C — Certification Provisions

§94.201 Applicability.

The requirements of this subpart are applicable to manufacturers of engines subject to the standards of subpart A of this part.

§94.202 Definitions.

The definitions of subpart A of this part apply to this subpart.

§94.203 Application for certification.

(a) For each engine family that complies with all applicable standards and requirements, the manufacturer shall submit to the Administrator a completed application for a certificate of conformity.

(b) The application shall be approved and signed by the authorized representative of the manufacturer.

(c) The application shall be updated and corrected by amendment, where necessary, as provided for in §94.210 to accurately reflect the manufacturer's production.

(d) Each application shall include the following information:

(1)(i) A description of the basic engine design, including but not limited to, the engine family specifications, the provisions of which are contained in §94.208;

(ii) A list of distinguishable configurations to be included in the engine family;

(2) An explanation of how the emission control system operates, including detailed descriptions of:

(i) All emission control system components;

(ii) The injection timing map or maps (i.e., degrees before or after top-dead-center), and any functional dependence of such timing on other operational parameters (e.g., engine coolant temperature or engine speed);

(iii) Each auxiliary emission control device (AECD); and

(iv) All fuel system components to be installed on any production or test engine(s);

(3) A description of the test engine;

- (4) Special or alternate test procedures, if applicable;
 - (5) A description of the operating cycle and the period of operation necessary to accumulate service hours on the test engine and stabilize emission levels;
 - (6) A description of all adjustable operating parameters (e.g., injection timing and fuel rate), including the following:
 - (i) The nominal or recommended setting and the associated production tolerances;
 - (ii) The intended adjustable range and the physically adjustable range;
 - (iii) The limits or stops used to limit adjustable ranges;
 - (iv) Production tolerances of the limits or stops used to establish each physically adjustable range; and
 - (v) Information relating to the reason that the physical limits or stops used to establish the physically adjustable range of each parameter, or any other means used to inhibit adjustment, are the most effective means possible of preventing adjustment of parameters to settings outside the manufacturer's specified adjustable ranges on in-use engines;
 - (7) For families participating in the averaging, banking, and trading program, the information specified in subpart D of this part;
 - (8) Projected U.S. directed production volume information for each configuration;
 - (9) A description of the test equipment and fuel proposed to be used;
 - (10) All test data obtained by the manufacturer on each test engine;
 - (11) The intended useful life period for the engine family, in accordance with §94.9(a);
 - (12) The intended deterioration factors for the engine family, in accordance with §94.218; and
 - (13) All information--including but not limited to message or parameter identification, scaling, limit, offset, and transfer function--required for EPA to interpret all messages and parameters broadcast on an engine's controller area network. (The manufacturer may reference publicly released controller area network standards where applicable. The format of this information shall be provided in a format similar to publicly released documents pertaining to controller area network standards.)
 - (14) An unconditional statement certifying that all engines included in the engine family comply with all requirements of this part and the Clean Air Act.
 - (15) A statement indicating whether the engine will be used in planing vessels or vessels with variable-pitch propellers.
- (e) At the Administrator's request, the manufacturer shall supply such additional

information as may be required to evaluate the application.

(f) (1) If the manufacturer submits some or all of the information specified in paragraph (d) of this section in advance of its full application for certification, the Administrator shall review the information and make the determinations required in §94.208 (d) within 90 days of the manufacturer's submittal.

(2) The 90-day decision period is exclusive of any elapsed time during which EPA is waiting for additional information requested from a manufacturer regarding an adjustable parameter (the 90-day period resumes upon receipt of the manufacturer's response). For example, if EPA requests additional information 30 days after the manufacturer submits information under paragraph (f)(1) of this section, then the Administrator would make a determination within 60 days of the receipt of the requested information from the manufacturer.

(g)(1) The Administrator may modify the information submission requirements of paragraph (d) of this section, provided that all of the information specified therein is maintained by the manufacturer as required by §94.215, and amended, updated, or corrected as necessary.

(2) For the purposes of this paragraph (g), §94.215 includes all information specified in paragraph (d) of this section, whether or not such information is actually submitted to the Administrator for any particular model year.

(3) The Administrator may review a manufacturer's records at any time. At the Administrator's discretion, this review may take place either at the manufacturer's facility or at another facility designated by the Administrator.

§ 94.204 Designation of engine families.

This section specifies the procedure and requirements for grouping of engines into engine families.

(a) Manufacturers shall divide their engines into groupings of engines which are expected to have similar emission characteristics throughout their useful life. Each group shall be defined as a separate engine family.

(b) For Category 1 marine engines, the following characteristics distinguish engine families:

- (1) Fuel;
- (2) Cooling method (including cooling medium);
- (3) Method of air aspiration;

(4) Method of exhaust aftertreatment (for example, catalytic converter or particulate trap);

(5) Combustion chamber design;

(6) Bore;

(7) Stroke;

(8) Number of cylinders, (engines with aftertreatment devices only);

(9) Cylinder arrangement (engines with aftertreatment devices only); and

(10) Fuel system configuration

(c) For Category 2 marine engines, the following characteristics distinguish engine families:

(1) The combustion cycle (e.g., diesel cycle);

(2) The type of engine cooling employed (air-cooled or water-cooled), and procedure(s) employed to maintain engine temperature within desired limits (thermostat, on-off radiator fan(s), radiator shutters, etc.);

(3) The bore and stroke dimensions;

(4) The approximate intake and exhaust event timing and duration (valve or port);

(5) The location of the intake and exhaust valves (or ports);

(6) The size of the intake and exhaust valves (or ports);

(7) The overall injection, or as appropriate ignition, timing characteristics (i.e., the deviation of the timing curves from the optimal fuel economy timing curve must be similar in degree);

(8) The combustion chamber configuration and the surface-to-volume ratio of the combustion chamber when the piston is at top dead center position, using nominal combustion chamber dimensions;

(9) The location of the piston rings on the piston;

(10) The method of air aspiration (turbocharged, supercharged, naturally aspirated, Roots blown);

(11) The turbocharger or supercharger general performance characteristics (e.g., approximate boost pressure, approximate response time, approximate size relative to engine displacement);

(12) The type of air inlet cooler (air-to-air, air-to-liquid, approximate degree to which inlet air is cooled);

(13) The intake manifold induction port size and configuration;

(14) The type of fuel and fuel system configuration;

(15) The configuration of the fuel injectors and approximate injection pressure;

(16) The type of fuel injection system controls (i.e., mechanical or electronic);

(17) The type of smoke control system;

(18) The exhaust manifold port size and configuration; and

(19) The type of exhaust aftertreatment system (oxidation catalyst, particulate trap), and characteristics of the aftertreatment system (catalyst loading, converter size vs engine size).

(d) Upon request by the manufacturer, engines that are eligible to be included in the

same engine family based on the criteria in paragraph (b) or (c) of this section may be divided into different engine families. This request must be accompanied by information the manufacturer believes supports the use of these different engine families.

(e) Upon request by the manufacturer, the Administrator may allow engines that would be required to be grouped into separate engine families based on the criteria in paragraph (b) or (c) of this section to be grouped into a single engine family if the manufacturer demonstrates that the engines will have similar emission characteristics. This request must be accompanied by emission information supporting the appropriateness of such combined engine families.

§94.205 Prohibited controls, adjustable parameters.

(a) Any system installed on, or incorporated in, a new engine to enable such engine to conform to the standards contained in this part:

(1) Shall not in its operation or function cause significant (as determined by the Administrator) emission into the ambient air of any noxious or toxic substance that would not be emitted in the operation of such engine without such system, except as specifically permitted by regulation;

(2) Shall not in its operation, function or malfunction result in any unsafe condition endangering the engine, the ship, its operators, riders or property on a ship, or persons or property in close proximity to the engine; and

(3) Shall function during all in-use operation, except as otherwise allowed by this part.

(b) In specifying the adjustable range of each adjustable parameter on a new engine, the manufacturer, shall:

(1) Ensure that safe engine operating characteristics are available within that range, as required by section 202(a)(4) of the Clean Air Act, taking into consideration the production tolerances; and

(2) To the maximum extent practicable, limit the physical range of adjustability to that which is necessary for proper operation of the engine.

§94.206 Required information.

(a) The manufacturer shall perform the tests required by the applicable test procedures, and submit to the Administrator the information required by this section: Provided, that if requested by the manufacturer, the Administrator may waive any requirement of this section for testing of engines for which the required emission data are otherwise available.

(b) The manufacturer shall submit exhaust emission deterioration factors, with supporting data. The determination of the deterioration factors shall be conducted in accordance with good engineering practice to ensure that the engines covered by a certificate issued under §94.208 will meet all of the emission standards in §94.8 in use for the useful life of the engine.

(c) The manufacturer shall submit emission data on such engines tested in accordance

with the applicable test procedures of Subpart B of this part. These data shall include zero hour data, if generated. In lieu of providing the emission data required by paragraph (a) of this section, the Administrator may, upon request of the manufacturer, allow the manufacturer to demonstrate (on the basis of previous emission tests, development tests, or other testing information) that the engine will conform with the applicable emission standards of §94.8.

(d) The manufacturer shall submit a statement that the engines for which certification is requested conform to the requirements in §94.7 and that the descriptions of tests performed to ascertain compliance with the general standards in §94.7, and the data derived from such tests, are available to the Administrator upon request.

(e) The manufacturer shall submit a statement that the emission data engine used to demonstrate compliance with the applicable standards of this part is in all material respects as described in the manufacturer's application for certification; that it has been tested in accordance with the applicable test procedures utilizing the fuels and equipment described in the application for certification; and that on the basis of such tests, the engine family conforms to the requirements of this part. If, on the basis of the data supplied and any additional data as required by the Administrator, the Administrator determines that the test engine was not as described in the application for certification or was not tested in accordance with the applicable test procedures utilizing the fuels and equipment as described in the application for certification, the Administrator may make the determination that the engine does not meet the applicable standards. If the Administrator makes such a determination, he/she may withhold, suspend, or revoke the certificate of conformity under §94.208 (c)(3)(i).

§94.207 Special test procedures.

(a) Establishment of special test procedures by EPA. The Administrator may, on the basis of written application by a manufacturer, establish special test procedures other than those set forth in this part, for any engine that the Administrator determines is not susceptible to satisfactory testing under the specified test procedures set forth in Subpart B of this part.

(b) Use of alternate test procedures by a manufacturer. (1) A manufacturer may elect to use an alternate test procedure, provided that it is equivalent to the specified procedures with respect to the demonstration of compliance, its use is approved in advance by the Administrator, and the basis for the equivalence with the specified test procedures is fully described in the manufacturer's application.

(2) The Administrator may reject data generated under alternate test procedures if the data do not correlate with data generated under the specified procedures.

§94.208 Certification.

(a) If, after a review of the application for certification, test reports and data acquired from an engine or from a development data engine, and any other information required or obtained by EPA, the Administrator determines that the application is complete and that

the engine family meets the requirements of the Act and this part, he/she will issue a certificate of conformity with respect to such engine family, except as provided by paragraph (c)(3) of this section. The certificate of conformity is valid for each engine family from the date of issuance by EPA until 31 December of the model year or calendar year for which it is issued and upon such terms and conditions as the Administrator deems necessary or appropriate to ensure that the production engines covered by the certificate will meet the requirements of the Act and of this part.

(b) [Reserved]

(c) (1) The manufacturer shall bear the burden of establishing to the satisfaction of the Administrator that the conditions upon which the certificates were issued were satisfied or excused.

(2) The Administrator will determine whether the test data included in the application represents all engines of the engine family.

(3) Notwithstanding the fact that any engine(s) may comply with other provisions of this subpart, the Administrator may withhold or deny the issuance of any certificate of conformity, or suspend or revoke any such certificate(s) which has (have) been issued with respect to any such engine(s) if:

(i) The manufacturer submits false or incomplete information in its application for certification thereof;

(ii) The manufacturer renders inaccurate any test data which it submits pertaining thereto or otherwise circumvents the intent of the Act, or of this part with respect to such engine;

(iii) Any EPA Enforcement Officer is denied access on the terms specified in §94.215 to any facility or portion thereof which contains any of the following:

(A) An engine which is scheduled to undergo emissions testing, or which is undergoing emissions testing, or which has undergone emissions testing; or

(B) Any components used or considered for use in the construction, modification or buildup of any engine which is scheduled to undergo emissions testing, or which is undergoing emissions testing, or which has undergone emissions testing for purposes of emissions certification; or

(C) Any production engine which is or will be claimed by the manufacturer to be covered by the certificate; or

(D) Any step in the construction of the engine; or

(E) Any records, documents, reports or histories required by this part to be kept concerning any of the items listed in paragraphs (c)(3)(iii)(A) through (D) of this section; or

(iv) Any EPA Enforcement Officer is denied "reasonable assistance" (as defined in §94.215).

(4) In any case in which a manufacturer knowingly submits false or inaccurate information or knowingly renders inaccurate or invalid any test data or commits any other fraudulent acts and such acts contribute substantially to the Administrator's decision to issue a certificate of conformity, the Administrator may deem such certificate void *ab initio*.

(5) In any case in which certification of an engine is to be withheld, denied, revoked or suspended under paragraph (c)(3) of this section, and in which the Administrator has presented to the manufacturer involved reasonable evidence that a violation of §94.215 in fact occurred, the manufacturer, if it wishes to contend that, even though the violation occurred, the engine in question was not involved in the violation to a degree that would warrant withholding, denial, revocation or suspension of certification under paragraph (c)(3) of this section, shall have the burden of establishing that contention to the satisfaction of the Administrator.

(6) Any revocation, suspension, or voiding of certification under paragraph (c)(3) of this section shall:

(i) Be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with §94.216; and

(ii) Extend no further than to forbid the introduction into commerce of engines previously covered by the certification which are still in the hands of the manufacturer, except in cases of such fraud or other misconduct that makes the certification invalid *ab initio*.

(7) The manufacturer may request, within 30 days of receiving notification, that any determination made by the Administrator under paragraph (c)(3) of this section to withhold or deny certification be reviewed in a hearing conducted in accordance with §94.216. The request shall be in writing, signed by an authorized representative of the manufacturer and shall include a statement specifying the manufacturer's objections to the Administrator's determinations, and data in support of such objections. If the Administrator finds, after a review of the request and supporting data, that the request raises a substantial factual issue, he/she will grant the request with respect to such issue.

(d) In approving an application for certification, the Administrator may specify:

(1) A broader range of adjustability than recommended by the manufacturer for those engine parameters which are subject to adjustment, if the Administrator determines that it will not be practical to keep the parameter adjusted within the recommended range in use;

(2) A longer useful life period, if the Administrator determines that the useful life of the engines in the engine family, as defined in §94.2, is longer than the period specified by the manufacturer; and/or

(3) Larger deterioration factors, if the Administrator determines that the deterioration factors specified by the manufacturer do not meet the requirements of §94.218.

(e) Within 30 days following receipt of notification of the Administrator's determinations made under paragraph (d) of this section, the manufacturer may request a hearing on the Administrator's determinations. The request shall be in writing, signed by an authorized representative of the manufacturer and shall include a statement specifying the manufacturer's objections to the Administrator's determinations and data in support of such objections. If, after review of the request and supporting data, the Administrator finds that the request raises a substantial factual issue, the manufacturer shall be provided with a hearing in accordance with §94.216 with respect to such issue.

§94.209 Special provisions for post-manufacturer marinizers.

(a) Eligibility Requirements. To be eligible to use the provisions of paragraph (b) of this section, the manufacturer shall demonstrate that it has met all the following requirements:

- (1) The manufacturer must be a post-manufacturer marinizer as defined in §94.2;
- (2) The base engine used for modification shall have a Certificate of Conformity issued under 40 CFR part 89 or 40 CFR part 92 or the heavy-duty engine provisions of 40 CFR part 86; and
- (3) The certified emission levels (after application of deterioration factors) of the base engine shall be below the numerical levels of the otherwise applicable standards of this part for all pollutants.

(b) Broader engine families. (1) In lieu of the requirements of §94.204, the manufacturer may group its engines into engine families that consist of engines that are within a single category of engines and have similar emission deterioration characteristics.

(2) All other provisions of this subpart shall apply to these engines using the engine family defined in (b)(1) of this section.

(c) Hardship relief. Post-manufacture marinizers may take any of the otherwise prohibited actions identified in §94.1103(a)(1) if approved in advance by the Administrator, and subject to the following requirements:

(1) Application for relief must be submitted to the Engine Programs and Compliance Division of the EPA in writing prior to the earliest date in which the applying manufacturer would be in violation of §94.1103. The manufacturer must submit evidence showing that the requirements for approval have been met.

(2) [Reserved]

(3) The conditions causing the impending violation must not be substantially the fault of the applying manufacturer.

(4) The conditions causing the impending violation must be such that the applying manufacturer will experience serious economic hardship if relief is not granted.

(5) The applying manufacturer must demonstrate that no other allowances under this part will be available to avoid the impending violation.

(6) Any relief granted must begin within one year after the implementation date of the standard applying to the engines for which relief is requested, and may not exceed one year in duration.

(7) The Administrator may impose other conditions on the granting of relief including provisions to recover the lost environmental benefit.

(d) Compliance date of standards. Post-manufacture marinizers may elect to delay the compliance date of the standards in §94.8 by one year, instead of using the provisions of paragraph (c) of this section. Post-manufacture marinizers wishing to take advantage of this provision must inform the Director of the Engine Programs and Compliance Division of their intent to do so in writing before the date that compliance with the standards would otherwise be mandatory.

§94.210 Amending the application and certificate of conformity.

(a) The manufacturer shall notify the Administrator when changes to information required to be described in the application for certification are to be made to a product line covered by a certificate of conformity. This notification shall include a request to amend the application or the existing certificate of conformity. Except as provided in paragraph (e) of this section, no manufacturer shall make said changes or produce said engines prior to receiving approval from EPA.

(b) A manufacturer's request to amend the application or the existing certificate of conformity shall include the following information:

(1) A full description of the change to be made in production, or of the engines to be added;

(2) Engineering evaluations or data showing that the engines as modified or added will comply with all applicable emission standards; and

(3) A determination whether the manufacturer's original test fleet selection is still appropriate, and if the original test fleet selection is determined not to be appropriate, test fleet selection(s) representing the engines changed or added which would have been required if the engines had been included in the original application for certification.

(c) The Administrator may require the manufacturer to perform tests on the engine representing the engine to be added or changed.

(d) (1) Based on the description of the amendment and data derived from such testing as the Administrator may require or conduct, the Administrator will determine whether the change or addition would still be covered by the certificate of conformity then in effect.

(2) If the Administrator determines that the change or new engine(s) meets the requirements of this part and the Act, the appropriate certificate of conformity shall be amended.

(3) If the Administrator determines that the changed engine(s) does not meet the requirements of this part and the Act, the certificate of conformity will not be amended. The Administrator shall provide a written explanation to the manufacturer of the decision not to amend the certificate. The manufacturer may request a hearing on a denial.

(e) A manufacturer may make changes in or additions to production engines concurrently with the notification to the Administrator, as required by paragraph (a) of this section, if the manufacturer complies with the following requirements:

(1) In addition to the information required in paragraph (b) of this section, the manufacturer shall supply supporting documentation, test data, and engineering evaluations as appropriate to demonstrate that all affected engines will still meet applicable emission standards.

(2) If, after a review, the Administrator determines additional testing is required, the manufacturer shall provide the required test data within 30 days or cease production of the affected engines.

(3) If the Administrator determines that the affected engines do not meet applicable requirements, the Administrator will notify the manufacturer to cease production of the affected engines and to recall and correct at no expense to the owner all affected engines previously produced.

(4) Election to produce engines under this paragraph will be deemed to be a consent to recall all engines that the Administrator determines do not meet applicable standards and to cause such nonconformity to be remedied at no expense to the owner.

§94.211 Emission-related maintenance instructions for purchasers.

(a) The manufacturer shall furnish or cause to be furnished to the ultimate purchaser of each new engine, subject to the standards prescribed in §94.8, written instructions for the proper maintenance and use of the engine as are reasonable and necessary to assure the proper functioning of the emissions control system, consistent with the applicable provisions of paragraph (b) of this section.

(1) The maintenance and use instructions required by this section shall be clear and easily understandable.

(2) The maintenance instructions required by this section shall contain a general description of the documentation that would demonstrate that the ultimate purchaser or any subsequent owner had complied with the instructions.

(b)(1) The manufacturer must provide in boldface type on the first page of the written maintenance instructions notice that maintenance, replacement, or repair of the emission control devices and systems may be performed by any engine repair establishment or individual.

(2) The instructions under paragraph (b)(1) of this section will not include any condition on the ultimate purchaser's or owner's using, in connection with such engine, any component or service (other than a component or service provided without charge under the terms of the purchase agreement) which is identified by brand, trade, or corporate name. Such instructions also will not directly or indirectly distinguish between service performed by any other service establishments with which such manufacturer has a commercial relationship and service performed by independent vessel or engine repair facilities with which such manufacturer has no commercial relationship.

(3) The prohibition of paragraph (b)(2) of this section may be waived by the Administrator if:

(i) The manufacturer satisfies the Administrator that the engine will function properly only if the component or service so identified is used in connection with such engine, and

(ii) The Administrator finds that such a waiver is in the public interest.

(c) The manufacturer shall provide to the Administrator, no later than the time of the submission required by §94.203, a copy of the emission-related maintenance instructions that the manufacturer proposes to supply to the ultimate purchaser or owner in accordance with this section. The Administrator will review such instructions to determine whether they are reasonable and necessary to ensure the proper functioning of the engine's emission control systems. If the Administrator determines that such instructions are not reasonable and necessary to ensure the proper functioning of the emission control systems, he/she may disapprove the application for certification or may require that the manufacturer modify the instructions.

(d) Any revision to the maintenance instructions which will affect emissions shall be supplied to the Administrator at least 30 days before being supplied to the ultimate purchaser or owner unless the Administrator consents to a lesser period of time, and is subject to the provisions of §94.210.

(e) This paragraph (e) specifies emission-related scheduled maintenance for purposes of obtaining durability data for marine engines. The maintenance intervals specified in this paragraph are minimum intervals.

(1) All emission-related scheduled maintenance for purposes of obtaining durability data must occur at the same or longer hours of use intervals as those specified in the manufacturer's maintenance instructions furnished to the ultimate purchaser of the engine under paragraph (a) of this section. This maintenance schedule may be updated as necessary throughout the testing of the engine, provided that no maintenance operation is deleted from the maintenance schedule after the operation has been performed on the test equipment or engine.

(2) Any emission-related maintenance which is performed on equipment, engines, subsystems, or components must be technologically necessary to ensure in-use compliance with the emission standards. The manufacturer must submit data which demonstrate to the Administrator that all of the emission-related scheduled maintenance which is to be performed is technologically necessary. Scheduled maintenance must be approved by the Administrator prior to being performed or being included in the maintenance instructions provided to the purchasers under paragraph (a) of this section.

(i) The Administrator may require longer maintenance intervals than those listed in paragraphs (e)(3) and (e)(4) of this section where the listed intervals are not technologically necessary.

(ii) The Administrator may allow manufacturers to specify shorter maintenance intervals than those listed in paragraphs (e)(3) and (e)(4) of this section where technologically necessary for Category 2 engines.

(3) The adjustment, cleaning, repair, or replacement of items listed in paragraphs (e)(3)(i) through (e)(3)(iii) of this section shall occur at 1,500 hours of use and at 1,500-hour intervals thereafter.

(i) Exhaust gas recirculation system-related filters and coolers.

(ii) Positive crankcase ventilation valve.

(iii) Fuel injector tips (cleaning only).

(4) The adjustment, cleaning and repair of items in paragraphs (e)(4)(i) through (e)(4)(vii) of this section shall occur at 3,000 hours of use and at 3,000-hour intervals thereafter for engines rated under 130 kW, or at 4,500-hour intervals thereafter for nonroad compression-ignition engines rated at or above 130 kW.

(i) Fuel injectors.

(ii) Turbocharger.

(iii) Electronic engine control unit and its associated sensors and actuators.

(iv) Particulate trap or trap-oxidizer system (including related components).

(v) Exhaust gas recirculation system (including all related control valves and tubing), except as otherwise provided in paragraph (e)(3)(i) of this section.

(vi) Catalytic convertor.

(vii) Any other add-on emission-related component (i.e., a component whose sole or

primary purpose is to reduce emissions or whose failure will significantly degrade emission control and whose function is not integral to the design and performance of the engine).

(f) Scheduled maintenance not related to emissions which is reasonable and technologically necessary (e.g., oil change, oil filter change, fuel filter change, air filter change, cooling system maintenance, adjustment of idle speed, governor, engine bolt torque, valve lash, injector lash, timing, lubrication of the exhaust manifold heat control valve, etc.) may be performed on durability vehicles at the least frequent intervals recommended by the manufacturer to the ultimate purchaser, (e.g., not the intervals recommended for severe service).

(g) Adjustment of engine idle speed on emission data engines may be performed once before the low-hour emission test point. Any other engine, emission control system, or fuel system adjustment, repair, removal, disassembly, cleaning, or replacement on emission data vehicles shall be performed only with advance approval of the Administrator.

(h) Equipment, instruments, or tools may not be used to identify malfunctioning, maladjusted, or defective engine components unless the same or equivalent equipment, instruments, or tools will be available to dealerships and other service outlets and are:

- (1) Used in conjunction with scheduled maintenance on such components; or
- (2) Used subsequent to the identification of a vehicle or engine malfunction, as provided in paragraph (e) of this section for emission data engines; or
- (3) Specifically authorized by the Administrator.

(i) All test data, maintenance reports, and required engineering reports shall be compiled and provided to the Administrator in accordance with §94.215.

(j)(1) The components listed in paragraphs (j)(1)(i) through (j)(1)(vi) of this section are defined as critical emission-related components.

- (i) Catalytic convertor.
- (ii) Electronic engine control unit and its associated sensors and actuators.
- (iii) Exhaust gas recirculation system (including all related filters, coolers, control valves, and tubing).
- (iv) Positive crankcase ventilation valve.
- (v) Particulate trap or trap-oxidizer system.

(vi) Any other add-on emission-related component (i.e., a component whose sole or primary purpose is to reduce emissions or whose failure will significantly degrade emission control and whose function is not integral to the design and performance of the engine).

(2) All critical emission-related scheduled maintenance must have a reasonable likelihood of being performed in use. The manufacturer must show the reasonable likelihood of such maintenance being performed in-use. Critical emission-related scheduled maintenance items which satisfy one of the conditions defined in paragraphs (j)(2)(i) through (j)(2)(vi) of this section will be accepted as having a reasonable likelihood of being performed in use.

(i) Data are presented which establish for the Administrator a connection between emissions and vehicle performance such that as emissions increase due to lack of maintenance, vehicle performance will simultaneously deteriorate to a point unacceptable

for typical operation.

(ii) Survey data are submitted which adequately demonstrate to the Administrator with an 80 percent confidence level that 80 percent of such engines already have this critical maintenance item performed in-use at the recommended interval(s).

(iii) A clearly displayed visible signal system approved by the Administrator is installed to alert the equipment operator that maintenance is due. A signal bearing the message “maintenance needed” or “check engine,” or a similar message approved by the Administrator, shall be actuated at the appropriate usage point or by component failure. This signal must be continuous while the engine is in operation and not be easily eliminated without performance of the required maintenance. Resetting the signal shall be a required step in the maintenance operation. The method for resetting the signal system shall be approved by the Administrator. The system must not be designed to deactivate upon the end of the useful life of the engine or thereafter.

(iv) A manufacturer may desire to demonstrate through a survey that a critical maintenance item is likely to be performed without a visible signal on a maintenance item for which there is no prior in-use experience without the signal. To that end, the manufacturer may in a given model year market up to 200 randomly selected vehicles per critical emission-related maintenance item without such visible signals, and monitor the performance of the critical maintenance item by the owners to show compliance with paragraph (j)(2)(ii) of this section. This option is restricted to two consecutive model years and may not be repeated until any previous survey has been completed. If the critical maintenance involves more than one engine family, the sample will be sales weighted to ensure that it is representative of all the families in question.

(v) The manufacturer provides the maintenance free of charge, and clearly informs the customer that the maintenance is free in the instructions provided under paragraph (a) of this section.

(vi) The manufacturer uses any other method which the Administrator approves as establishing a reasonable likelihood that the critical maintenance will be performed in-use.

(3) Visible signal systems used under paragraph (j)(2)(iii) of this section are considered an element of design of the emission control system. Therefore, disabling, resetting, or otherwise rendering such signals inoperative without also performing the indicated maintenance procedure is a prohibited act.

§94.212 Labeling.

(a) General requirements.

(1) Each new engine covered by a certificate of conformity under §94.208 shall be labeled by the manufacturer in the manner described in this paragraph (b) of this section at the time of manufacture.

(2) Each new marine engine modified from a base engine by post-manufacturer marinizers in accordance with the provisions of §94.209 (b) and covered by a certificate of conformity under §94.208 shall be labeled by the PMM in the manner described in

paragraph (b) of this section.

(b) Engine labels.

(1) Engine labels meeting the specifications of paragraph (b)(2) of this section shall be applied by every manufacturer at the point of original manufacture.

(2)(i) Engine labels shall be permanent and legible and shall be affixed to the engine in a position in which it will be readily visible after installation of the engine in the vessel.

(ii) The label shall be attached to an engine part necessary for normal operation and not normally requiring replacement during the useful life of the engine.

(iii) The label shall be affixed by the manufacturer in such manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment which is easily detached from such engine.

(iv) The label may be made up of more than one piece, provided that all pieces are permanently attached to the same engine part.

(v) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

(A) The label heading: Marine Engine Emission Control Information.

(B) Full corporate name and trademark of the manufacturer.

(C) The model year.

(D) The category and subcategory of marine engine.

(E) Engine family and configuration identification.

(F) A prominent unconditional statement of compliance with U.S. Environmental Protection Agency regulations which apply to marine engines designated by the parameters of paragraph (b)(2)(v)(A) through (E) of this section

(G) The useful life of the engine.

(H) The standards and/or FELs to which the engine was certified.

(I) Engine tune-up specifications and adjustments, as recommended by the manufacturer in accordance with the applicable emission standards, including but not limited to idle speeds(s), injection timing, valve lash (as applicable), as well as other parameters deemed necessary by the manufacturer.

(c) The provisions of this section shall not prevent a manufacturer from also providing on the label any other information that such manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the vessel or engine.

§94.213 Submission of engine identification numbers.

(a) Upon request of the Administrator, the manufacturer of any engine covered by a certificate of conformity shall, within 30 days of receipt of such request, identify by engine identification number, the engines covered by the certificate of conformity.

(b) The manufacturer of any engines covered by a certificate of conformity shall provide to the Administrator, within 60 days of the issuance of a certificate of conformity, an explanation of the elements in any engine identification coding system in sufficient

detail to enable the Administrator to identify those engines which are covered by a certificate of conformity.

§94.214 Production engines.

Any manufacturer obtaining certification under this part shall supply to the Administrator, upon his/her request, a reasonable number of production engines, as specified by the Administrator. The engines shall be representative of the engines, emission control systems, and fuel systems offered and typical of production engines available for sale or use under the certificate. These engines shall be supplied for testing at such time and place and for such reasonable periods as the Administrator may require.

§94.215 Maintenance of records; submittal of information; right of entry.

(a) Any manufacturer subject to any of the standards or procedures prescribed in this subpart shall establish, maintain and retain the following adequately organized and indexed records:

(1) General records. The records required to be maintained by this paragraph (a) shall consist of:

(i) Identification and description of all certification engines for which testing is required under this subpart.

(ii) A description of all emission control systems which are installed on or incorporated in each certification engine.

(iii) A description of all procedures used to test each such certification engine.

(iv) A copy of all applications for certification, filed with the Administrator.

(2) Individual records. (i) A brief history of each engine used for certification under this subpart including:

(A) In the case where a current production engine is modified for use as a certification engine, a description of the process by which the engine was selected and of the modifications made. In the case where the certification engine is not derived from a current production engine, a general description of the buildup of the engine (e.g., whether experimental heads were cast and machined according to supplied drawings). In the cases in the previous two sentences, a description of the origin and selection process for fuel system components, ignition system components (as applicable), intake air pressurization and cooling system components, cylinders, pistons and piston rings, exhaust smoke control system components, and exhaust aftertreatment devices as applicable, shall be included. The required descriptions shall specify the steps taken to assure that the certification engine, with respect to its engine, drivetrain, fuel system, emission control system components, exhaust aftertreatment devices, or any other devices or components as applicable, that can reasonably be expected to influence exhaust emissions will be representative of production engines and that either: all components and/or engine, construction processes, component inspection and selection techniques, and assembly techniques employed in constructing such engines are reasonably likely to be implemented for production engines; or that they are as close as practicable to planned

construction and assembly process.

(B) A complete record of all emission tests performed (except tests performed by EPA directly), including test results, the date and purpose of each test, and the number of hours accumulated on the engine.

(C) A record and description of all maintenance and other servicing performed, giving the date of the maintenance or service and the reason for it.

(D) A record and description of each test performed to diagnose engine or emission control system performance, giving the date and time of the test and the reason for it.

(E) A brief description of any significant events affecting the engine during the period covered by the history and not described by an entry under one of the previous headings, including such extraordinary events as accidents involving the engine or dynamometer runaway.

(ii) Each such history shall be started on the date that the first of any of the selection or buildup activities in paragraph (a)(2)(i)(A) of this section occurred with respect to the certification engine and shall be kept in a designated location.

(3) All records, other than routine emission test records, required to be maintained under this subpart shall be retained by the manufacturer for a period of 8 years after issuance of all certificates of conformity to which they relate. Routine emission test records shall be retained by the manufacturer for a period of one (1) year after issuance of all certificates of conformity to which they relate. Records may be retained as hard copy or reduced to computer disks, etc., depending on the record retention procedures of the manufacturer: *Provided*, that in every case all the information contained in the hard copy shall be retained.

(4) Nothing in this section limits the Administrator's discretion in requiring the manufacturer to retain additional records or submit information not specifically required by this section.

(5) Pursuant to a request made by the Administrator, the manufacturer shall submit to him/her the information that is required to be retained.

(6) EPA may void a certificate of conformity *ab initio* for an engine family for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request.

(b) The manufacturer of engines subject to any of the standards prescribed in this part shall submit to the Administrator, at the time of issuance by the manufacturer, copies of all instructions or explanations regarding the use, repair, adjustment, maintenance, or testing of such engine, relevant to the control of crankcase, or exhaust emissions issued by the manufacturer, for use by other manufacturers, assembly plants, distributors, dealers, owners and operators. Any material not translated into the English language need not be submitted unless specifically requested by the Administrator.

(c) Any manufacturer participating in averaging, banking and trading program of subpart D of this part 94 must comply with the maintenance of records requirements of §94.308.

(d)(1) Any manufacturer who has applied for certification of a new engine subject to certification testing under this subpart shall admit or cause to be admitted any EPA Enforcement Officer during operating hours on presentation of credentials to any of the following:

- (i) Any facility where any such tests or any procedures or activities connected with such test are or were performed;
- (ii) Any facility where any engine which is being tested (or was tested, or is to be tested) is present;
- (iii) Any facility where any construction process or assembly process used in the modification or buildup of such an engine into a certification engine is taking place or has taken place; or
- (iv) Any facility where any record or other document relating to any of the activities listed in this paragraph (d)(1).

(2) Upon admission to any facility referred to in paragraph (d)(1) of this section, any EPA Enforcement Officer shall be allowed:

- (i) To inspect and monitor any part or aspect of such procedures, activities and testing facilities including, but not limited to, monitoring engine preconditioning, emissions tests, service accumulation, maintenance, and engine storage procedures, and to verify correlation or calibration of test equipment;
- (ii) To inspect and make copies of any such records, designs, or other documents, including those records specified in Subpart D of this part; and
- (iii) To inspect and/or photograph any part or aspect of any such certification engine and any components to be used in the construction thereof.

(3) In order to allow the Administrator to determine whether or not production engines, conform to the conditions upon which a certificate of conformity has been issued, or conform in all material respects to the design specifications applicable to those engines, as described in the application for certification for which a certificate of conformity has been issued, any manufacturer shall admit any EPA Enforcement Officer on presentation of credentials to:

- (i) Any facility where any document, design or procedure relating to the translation of the design and construction of engines and emission related components described in the application for certification or used for certification testing into production engines is located or carried on;
- (ii) Any facility where any engines to be introduced into commerce are manufactured; and
- (iii) Any facility where records specified this section are located.

(4) On admission to any such facility referred to in paragraph (d)(3) of this section, any EPA Enforcement Officer shall be allowed:

- (i) To inspect and monitor any aspects of such manufacture and other procedures;
- (ii) To inspect and make copies of any such records, documents or designs;
- (iii) To inspect and photograph any part or aspect of any such engine(s) and any component used in the assembly thereof that are reasonably related to the purpose of his/her entry; and
- (iv) To inspect and make copies of any records and documents specified in this section.

(5) Any EPA Enforcement Officer shall be furnished by those in charge of a facility being inspected with such reasonable assistance as he/she may request to help him/her discharge any function listed in this part. Each applicant for or recipient of certification is required to cause those in charge of a facility operated for its benefit to furnish such

reasonable assistance without charge to EPA whether or not the applicant controls the facility.

(6) The duty to admit or cause to be admitted any EPA Enforcement Officer applies to any facility involved in the manufacturing or assembling of engines, whether or not the manufacturer owns or controls the facility in question and applies both to domestic and to foreign manufacturers and facilities. EPA will not attempt to make any inspections which it has been informed that local law forbids. However, if local law makes it impossible to do what is necessary to insure the accuracy of data generated at a facility, no informed judgment that an engine is certifiable or is covered by a certificate can properly be based on those data. It is the responsibility of the manufacturer to locate its testing and manufacturing facilities in jurisdictions where this situation will not arise.

(7) For purposes of this section:

(i) "Presentation of credentials" shall mean display of the document designating a person as an EPA Enforcement Officer.

(ii) Where component or engine storage areas or facilities are concerned, "operating hours" shall mean all times during which personnel other than custodial personnel are at work in the vicinity of the area or facility and have access to it.

(iii) Where facilities or areas other than those covered by paragraph (d)(7)(ii) of this section are concerned, "operating hours" shall mean all times during which an assembly line is in operation or all times during which testing, maintenance, service accumulation, production or compilation of records, or any other procedure or activity related to certification testing, to translation of designs from the test stage to the production stage, or to engine manufacture, or assembly is being carried out in a facility.

(iv) "Reasonable assistance" includes, but is not limited to, clerical, copying, interpretation and translation services, the making available on request of personnel of the facility being inspected during their working hours to inform the EPA Enforcement Officer of how the facility operates and to answer his questions, and the performance on request of emissions tests on any engine which is being, has been, or will be used for certification testing. Such tests shall be nondestructive, but may require appropriate service accumulation. A manufacturer may be compelled to cause the personal appearance of any employee at such a facility before an EPA Enforcement Officer by written request for his appearance, signed by the Assistant Administrator for Air and Radiation or the Assistant Administrator for Enforcement and Compliance Assurance, served on the manufacturer. Any such employee who has been instructed by the manufacturer to appear will be entitled to be accompanied, represented and advised by counsel.

(v) Any entry without 24 hour prior written or oral notification to the affected manufacturer shall be authorized in writing by the Assistant Administrator for Air and Radiation or the Assistant Administrator for Enforcement and Compliance Assurance.

(8) EPA may void a certificate of conformity *ab initio* for engines introduced into commerce if the manufacturer (or contractor for the manufacturer, if applicable) fails to comply with any provision of this section.

§94.216 Hearing procedures.

(a)(1) After granting a request for a hearing under §94.210 or §94.208, the Administrator shall designate a Presiding Officer for the hearing.

(2) The hearing shall be held as soon as practicable at a time and place fixed by the Administrator or by the Presiding Officer.

(3) In the case of any hearing requested pursuant to §94.208, the Administrator may in his/her discretion direct that all argument and presentation of evidence be concluded within such fixed period not less than 30 days as he/she may establish from the date that the first written offer of a hearing is made to the manufacturer. To expedite proceedings, the Administrator may direct that the decision of the Presiding Officer (who may, but need not be the Administrator) shall be the final EPA decision.

(b)(1) Upon his/her appointment pursuant to paragraph (a) of this section, the Presiding Officer will establish a hearing file. The file shall consist of the notice issued by the Administrator under §94.210 or §94.208 together with any accompanying material, the request for a hearing and the supporting data submitted therewith, and all documents relating to the request for certification and all documents submitted therewith, and correspondence and other data material to the hearing.

(2) The hearing file will be available for inspection by the applicant at the office of the Presiding Officer.

(c) An applicant may appear in person, or may be represented by counsel or by any other duly authorized representative.

(d)(1) The Presiding Officer, upon the request of any party, or in his/her discretion, may arrange for a prehearing conference at a time and place specified by him/her to consider the following:

- (i) Simplification of the issues;
- (ii) Stipulations, admissions of fact, and the introduction of documents;
- (iii) Limitation of the number of expert witnesses;
- (iv) Possibility of agreement disposing of all or any of the issues in dispute;
- (v) Such other matters as may aid in the disposition of the hearing, including such additional tests as may be agreed upon by the parties.

(2) The results of the conference shall be reduced to writing by the Presiding Officer and made part of the record.

(e)(1) Hearings shall be conducted by the Presiding Officer in an informal but orderly and expeditious manner. The parties may offer oral or written evidence, subject to the exclusion by the Presiding Officer of irrelevant, immaterial and repetitious evidence.

(2) Witnesses will not be required to testify under oath. However, the Presiding Officer shall call to the attention of witnesses that their statements may be subject to the provisions of 18 U.S.C. 1001 which imposes penalties for knowingly making false statements or representations, or using false documents in any matter within the jurisdiction of any department or agency of the United States.

(3) Any witness may be examined or cross-examined by the Presiding Officer, the parties, or their representatives.

(4) Hearings shall be reported verbatim. Copies of transcripts of proceedings may be purchased by the applicant from the reporter.

(5) All written statements, charts, tabulations, and similar data offered in evidence at

the hearings shall, upon a showing satisfactory to the Presiding Officer of their authenticity, relevancy, and materiality, be received in evidence and shall constitute a part of the record.

(6) Oral argument may be permitted in the discretion of the Presiding Officer and shall be reported as part of the record unless otherwise ordered by him/her.

(f)(1) The Presiding Officer shall make an initial decision which shall include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law, or discretion presented on the record. The findings, conclusions, and written decision shall be provided to the parties and made a part of the record. The initial decision shall become the decision of the Administrator without further proceedings unless there is an appeal to the Administrator or motion for review by the Administrator within 30 days of the date the initial decision was filed.

(2) On appeal from or review of the initial decision, the Administrator shall have all the powers which he/she would have in making the initial decision including the discretion to require or allow briefs, oral argument, the taking of additional evidence or the remanding to the Presiding Officer for additional proceedings. The decision by the Administrator shall include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law, or discretion presented on the appeal or considered in the review.

§94.217 Emission data engine selection.

(a) The manufacturer must select for testing, from each engine family, the engine configuration which is expected to be worst-case for exhaust emission compliance on in-use engines, considering all exhaust emission constituents and the range of installation options available to vessel builders.

(b) Each engine in the test fleet must be constructed to be representative of production engines.

(c) After review of the manufacturer's test fleet, the Administrator may select from the available fleet one additional test engine from each engine family.

(d) Each engine selected shall be tested according to the provisions of Subpart B of this part.

(e) In lieu of testing an emission data engine selected under paragraph (a) of this section and submitting the resulting data, a manufacturer may, with Administrator approval, use emission data on a similar engine for which certification has previously been obtained or for which all applicable data required under this subpart have previously been submitted. These data must be submitted in the application for certification.

§94.218 Deterioration factor determination.

Manufacturers shall determine exhaust emission deterioration factors using good engineering judgement according to the provisions of this section. Every deterioration factor must be, in the Administrator's judgment, consistent with emissions increases observed in-use based on emission testing of similar engines. Deterioration factors that

predict emission increases over the useful life of an engine that are significantly less than the emission increases over the useful life observed from in-use testing of similar engines shall not be used.

(a) A separate exhaust emission deterioration factor shall be established for each engine family and for each emission constituent applicable to that family.

(b) Calculation procedures. (1) For engines not utilizing aftertreatment technology (e.g., catalyst). For each applicable emission constituent, an additive deterioration factors shall be used; that is, a deterioration factor that when added to the low mileage emission rate equals the emission rate at the end of useful life. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this section.

(2) For engines utilizing aftertreatment technology (e.g., catalyst). For each applicable emission constituent, a multiplicative deterioration factors shall be used; that is deterioration factors that when multiplied by the low mileage emission rate equal the emission rate at the end of useful life. However, if the deterioration factor supplied by the manufacturer is less than one, it shall be one for the purposes of this section.

(c) Rounding. (1) In the case of a multiplicative exhaust emission deterioration factor, the factor shall be rounded to three places to the right of the decimal point in accordance with ASTM E 29-93a (incorporated by reference at §94.5).

(2) In the case of an additive exhaust emission deterioration factor, the factor shall be established to a minimum of two places to the right of the decimal in accordance with ASTM E 29-93a (incorporated by reference at §94.5).

(d)(1) Except as allowed by paragraph (d)(2) of this section, the manufacturer shall determine the deterioration factors based on service accumulation and related testing, according to the manufacturer's procedures, and the provisions of §§94.219 and 94.220. The manufacturer shall determine the form and extent of this service accumulation, consistent with good engineering practice, and shall describe this process in the application for certification.

(2) *Alternatives to service accumulation and testing for the determination of a deterioration factor.* A written explanation of the appropriateness of using an alternative must be included in the application for certification.

(i) *Carryover and carryacross of durability emission data.* In lieu of testing an emission data or durability data engine selected under §94.217 or §94.219, and submitting the resulting data, a manufacturer may, with Administrator approval, use exhaust emission deterioration data on a similar engine for which certification to the same standard has previously been obtained or for which all applicable data required under this subpart have previously been submitted. These data must be submitted in the application for certification.

(ii) *Use of non-marine deterioration data.* In the case where a manufacturer produces a certified motor vehicle engine, locomotive engine, or other nonroad engine that is similar to the marine engine to be certified, deterioration data from the non-marine engine may be applied to the marine engine. This application of deterioration data from such an engine to a marine engine is subject to Administrator approval, and the determination of whether the engines are similar shall be based on good engineering judgment.

(iii) *Engineering analysis for established technologies.* In the case where an engine family uses technology which is well established, an analysis based on good engineering practices may be used in lieu of testing to determine a deterioration factor for that engine family. Engines using exhaust gas recirculation or aftertreatment are excluded from this provision. The manufacturer shall provide a written statement to the Administrator that all data, analyses, test procedures, evaluations, and other documents, on which the deterioration factor is based, are available to the Administrator upon request.

§94.219 Durability data engine selection.

(a) The manufacturer shall select for durability testing, from each engine family, the engine configuration which is expected to generate the highest level of exhaust emission deterioration on engines in use, considering all exhaust emission constituents and the range of installation options available to vessel builders. The manufacturer shall use good engineering judgment in making this selection.

(b) In lieu of testing the engine selected in paragraph (a) of this section, the manufacturer may select, using good engineering judgement, an equivalent or worse-case engine configuration. Carryover data satisfying the provisions of §94.220 may also be used in lieu of testing the configuration selected in paragraph (a) of this section.

(c) Durability data engines shall be built from subsystems and components that are representative of actual production engines.

§94.220 Service accumulation.

(a) Stabilized emission service accumulation for emission data engines.

(1) Each test emission data engine in the test fleet must be operated with all emission control systems operating properly for a period sufficient to stabilize emissions.

(2) A manufacturer may elect to consider as stabilized emission levels from emission data engines with 125 or fewer hours of service.

(b) Durability data engines shall accumulate service in a manner which will represent the emission levels from in-use engines over their full useful life, consistent with good engineering judgement.

(1) Components may be removed from the engine and aged separately.

(2) End of useful life emission levels and deterioration factors may be projected from durability data engines which have completed less than full useful life service accumulation, provided that the amount of service accumulation completed and projection procedures are determined using good engineering judgement.

(c) No maintenance, other than recommended lubrication and filter changes or maintenance otherwise allowed by this part, may be performed during service accumulation without the Administrator's approval.

(d) Service accumulation should be performed in a manner using good engineering judgment to ensure that emissions are representative of in-use engines.

(e) The manufacturer must maintain, and provide to the Administrator if requested, records stating the rationale for selecting the service accumulation period and records describing the method used to accumulate service hours on the test engine(s).

§94.221 Application of good engineering judgment.

(a) The manufacturer shall exercise good engineering judgment in making all decisions called for under this subpart, including but not limited to selections, categorizations, determinations, and applications of the requirements of the subpart.

(b) Upon written request by the Administrator, the manufacturer shall provide within 15 working days (or such longer period as may be allowed by the Administrator) a written description of the engineering judgment in question.

(c) The Administrator may reject any such decision by a manufacturer if it is not based on good engineering judgment or is otherwise inconsistent with the requirements of this subpart.

(d) If the Administrator rejects a decision by a manufacturer with respect to the exercise of good engineering judgment, the following provisions shall apply:

(1) If the Administrator determines that incorrect information was deliberately used in the decision process, that important information was deliberately overlooked, that the decision was not made in good faith, or that the decision was not made with a rational basis, the Administrator may suspend or void *ab initio* a certificate of conformity.

(2) If the Administrator determines that the manufacturer's decision is not covered by the provisions of paragraph (d)(1) of this section, but that a different decision would reflect a better exercise of good engineering judgment, then the Administrator will notify the manufacturer of this concern and the basis of the concern.

(i) The manufacturer shall have at least 30 days to respond to this notice. The Administrator may extend this response period upon request from the manufacturer if it is necessary to generate additional data for the manufacturer's response.

(ii) The Administrator shall make the final ruling after considering the information provided by the manufacturer during the response period. If the Administrator determines that the manufacturer's decision was not made using good engineering judgment, he/she may reject that decision and apply the new ruling to future corresponding decisions as soon as practicable.

(e) The Administrator shall notify the manufacturer in writing regarding any decision reached under paragraph (d)(1) or (2) of this section. The Administrator shall include in this notification the basis for reaching the determination.

(f) Within 30 working days following receipt of notification of the Administrator's determinations made under paragraph (d) of this section, the manufacturer may request a hearing on those determinations. The request shall be in writing, signed by an authorized representative of the manufacturer, and shall include a statement specifying the manufacturer's objections to the Administrator's determinations, and data or other analysis in support of such objections. If, after review of the request and supporting data or analysis, the Administrator finds that the request raises a substantial factual issue,

he/she shall provide the manufacturer a hearing in accordance with §94.216 of this subpart with respect to such issue.

Subpart D - Certification Averaging, Banking, and Trading Provisions

§94.301 Applicability.

Marine engine families subject to the standards of Subpart A of this part are eligible to participate in the certification averaging, banking, and trading program described in this subpart. The provisions of this subpart apply to manufacturers of new engines that are subject to the emission standards of §94.8.

§94.302 Definitions.

The definitions of Subpart A of this part apply to this subpart. The following definitions also apply.

Applicable standard means a standard that would have otherwise been applicable had the engine not been certified under this subpart to an FEL different than that standard.

Broker means any entity that facilitates a trade between a buyer and seller.

Buyer means the entity that receives credits as a result of trade or transfer.

Reserved credits means credits that have been generated but have not yet been reviewed by EPA or used to demonstrate compliance under the averaging provisions of this subpart.

Seller means the entity that provides credits during a trade.

§94.303 General provisions.

(a) Participation in the averaging, banking, and trading program is voluntary. A manufacturer may choose to involve some or all of its engine families in any or all aspects of the program.

(b) An engine family is eligible to participate in the certification averaging, banking, and trading program for THC+NO_x and PM emissions if it is subject to regulation under this part with certain exceptions specified in paragraph (c) of this section. No averaging, banking, and trading program is available for meeting the CO standards of this part.

(c) Engines may not participate in the certification averaging, banking, and trading program if they are exported. Only engines certified under this part are eligible for inclusion in this certification averaging, banking, and trading program.

(d) Averaging involves the generation of credits by a manufacturer for use by that same manufacturer in the same calendar year. A manufacturer may use averaging during certification to offset an emission exceedance of an engine family caused by an FEL above the applicable emission standard, subject to the provisions of this subpart.

(e) Banking involves the generation of credits by a manufacturer in a given calendar

year for use in a subsequent model year. A manufacturer may bank actual credits only after the end of the calendar year and after EPA has reviewed the manufacturer's end-of-year reports. During the calendar year and before submittal of the end-of-year report, credits originally designated in the certification process for banking will be considered reserved and may be redesignated for trading or averaging in the end-of-year report. Credits declared for banking from the previous calendar year that have not been reviewed by EPA may be used in averaging or trading transactions. However, such credits may be revoked at a later time following EPA review of the end-of-year report or any subsequent audit actions.

(f) Trading involves the sale of banked credits for use in certification of new engines under this part. Only banked credits may be traded; reserved credits may not be traded.

§94.304 Compliance requirements.

(a) Manufacturers wishing to participate in certification averaging, banking and trading programs shall select a FEL for each engine family they wish to include. The level of the FEL shall be selected by the manufacturer, subject to the upper limits described in paragraph (m) of this section. An engine family certified to an FEL is subject to all provisions specified in this part, except that the applicable FEL replaces the applicable THC+NO_x and PM emission standard for the family participating in the averaging, banking, and trading program.

(b) A manufacturer may certify one or more engine families at FELs above or below the applicable emission standard, provided the summation of the manufacturer's projected balance of all credit transactions in a given calendar year is greater than or equal to zero, as calculated for each family under §94.305 and reported under §94.309.

(c) Manufacturers certifying engine families with FELs exceeding the applicable emission standard shall obtain emission credits in amounts sufficient to address the shortfall. Credits may be obtained from averaging, banking, or trading, subject to the restrictions described in this subpart.

(d) Manufacturers certifying engine families with FELs below the applicable emission standard may generate emission credits to average, bank, or trade, or a combination thereof.

(e) Engine families may not generate credits for one pollutant while also using credits for another pollutant in the same model year.

(f) Credits may only be used for certification; they may not be used to remedy a violation of the FEL determined by production line or in-use testing. Credits may be used to allow subsequent production of engines for an engine family failing production line testing if the manufacturer elects to recertify to a higher FEL.

(g) [Reserved].

(h) If an FEL is changed after initial certification in any given model year, the manufacturer must conduct production line testing to verify that the emission levels are achieved.

(i) Manufacturers participating in the averaging, banking and trading program must

demonstrate compliance with the applicable emission standards at the end of the model year. Manufacturers that have certified engine families to FELs above the applicable emission standards and do not have sufficient emission credits to offset the difference between the emission standard and the FEL for such engine family (ies) will be in violation of the conditions of the certificate of conformity for such engine family (ies). The certificates of conformity may be voided ab initio for those engine families.

(j) In the event of a negative credit balance resulting from a credit trade, both the buyer(s) and the seller(s) are liable, except in cases involving fraud. Certificates of all engine families participating in a negative trade may be voided ab initio.

(1) Where a buyer of credits is not responsible for causing the negative credit balance, it is only liable to supply additional credits equivalent to any amount of invalid credits that it used.

(2) Credit holders responsible for the credit shortfall may be subject to the requirements of §94.309(g)(3).

(k) Averaging sets. Credits generated by engine families in one averaging set may not be used for compliance by engine families in any other averaging set. The averaging sets are defined as:

- (1) Category 1 engines certified to the Tier 2 standards.
- (2) Category 2 engines certified to the Tier 2 standards.
- (3) Category 1 engines certified to the Tier 3 standards.
- (4) Category 2 engines certified to the Tier 3 standards.

(l) Credit life shall be unlimited.

(m) Upper limits. The FELs for THC+NO_x and PM for new engines certified for participation in this averaging, banking and trading program may not exceed the following values:

(1) For Category 1 engines, the FEL may not exceed the levels contained in Table D-1.

Table D-1.–Category 1 Upper Limits for Family Emission Limits

Subcategory liters/cylinder	Tier	Model Year*	THC+NO _x FEL g/kW-hr	PM FEL g/kW-hr
power ≥ 37 kW disp. < 0.9	Tier 2	2004	11.5	1.2
	Tier 3	2008	7.5	1.2
0.9 ≤ disp. < 1.2	Tier 2	2004	11.5	1.2
	Tier 3	2008	7.5	1.2
1.2 ≤ disp. < 1.5	Tier 2	2004	10.5	0.54
	Tier 3	2008	7.5	0.54
1.5 ≤ disp. < 2.0	Tier 2	2004	10.5	0.54
	Tier 3	2008	7.5	0.54

2.0 ≤ disp. < 2.5	Tier 2	2006	10.5	0.54
	Tier 3	2008	7.5	0.54
2.5 ≤ disp. < 5.0	Tier 2	2008	10.5	0.54
	Tier 3	2010	7.5	0.54

* The model years listed indicate the model years for which the specified tier of limits take effect.

(2) For Category 2 engines, the FEL may not exceed the levels contained in Table D-2.

Table D-2.–Category 2 Upper Limits for Family Emission Limits

Tier	Model Year*	THC+NO _x FEL g/kW-hr	PM FEL g/kW-hr
Tier 2	2008	10.7	0.60
Tier 3	2010	7.5	0.60

* The model years listed indicate the model years for which the specified tier of limits take effect.

§94.305 Credit generation and use calculation.

(a) For each participating engine family, THC+NO_x and PM emission credits (positive or negative) are to be calculated according to the equation in paragraph (b) of this section and rounded in accordance with ASTM E29-93a, to the nearest one-hundredth of a megagram (Mg). Consistent units are to be used throughout the calculation.

(b) Credits for each engine family are calculated as:

$$\text{Emission credits} = (\text{Std} - \text{FEL}) \times (\text{UL}) \times (\text{Production}) \times (\text{AvgPR}) \times (\text{LF}) \times (10^{-6})$$

Where:

(i) Std = the applicable cycle-weighted marine engine THC+NO_x and/or PM emission standard in grams per kilowatt-hour.

(ii) FEL = the family emission limit for the engine family in grams per kilowatt-hour. (The FEL may not exceed the limit established in §94.304(m) for each pollutant.)

(iii) UL = the useful life in hours.

(iv) Production = the number of engines participating in the averaging, banking, and trading program within the given engine family during the calendar year (or the number of engines in the subset of the engine family for which credits are being calculated). Quarterly production projections are used for initial certification. Actual applicable production/sales volumes are used for end-of-year compliance determination.

(v) AvgPR = average power rating of all of the configurations within an engine family, calculated on a sales-weighted basis, in kilowatts.

(vi) LF = the load factor, dependent on whether the engine is intended for propulsion or auxiliary applications, as follows:

- (A) 0.69 for propulsion engines,
- (B) 0.51 for auxiliary engines.

§94.306 Certification.

(a) In the application for certification a manufacturer must:

(1) Declare its intent to include specific engine families in the averaging, banking, and/or trading programs. Separate declarations are required for each pollutant (THC+NO_x and PM).

(2) Declare FELs for each engine family participating in certification averaging, banking, and/or trading.

(i) The FELs must be to the same number of significant digits as the emission standard.

(ii) In no case may the FEL exceed the upper limit prescribed in §94.304(m).

(3) Conduct and submit detailed calculations of projected emission credits (positive or negative) based on quarterly production projections for each participating family and for each pollutant, using the applicable equation in §94.305 and the applicable values of the terms in the equation for the specific family.

(i) If the engine family is projected to have negative emission credits, state specifically the source (manufacturer/engine family) of the credits necessary to offset the credit deficit according to quarterly projected production.

(ii) If the engine family is projected to generate credits, state specifically where the quarterly projected credits will be applied (manufacturer/engine family or reserved).

(4) Submit a statement that the engines for which certification is requested will not, to the best of the manufacturer's belief, cause the manufacturer to have a negative credit balance when all credits are calculated for all the manufacturer's engine families participating in the averaging, banking, and trading program.

(b) Based on this information, each manufacturer's certification application must demonstrate:

(1) That at the end of model year production, each engine family has a net emissions credit balance equal to or greater than zero for any pollutant and program for which participation in certification under averaging, banking, and/or trading is being sought. The equation in section §94.305 shall be used in this calculation for each engine family.

(2) That the manufacturer will obtain sufficient credits to be used to comply with the emission standard for any engine family with an FEL that exceeds the applicable emission standard, or where credits will be applied if the FEL is less than the emission standard. In cases where credits are being obtained, for each engine family involved the manufacturer must identify specifically the source of the credits being used (manufacturer/engine family). All such reports shall include all credits involved in certification averaging, banking, or trading.

(3) That in cases where credits are being generated/supplied, the use of such credits is specifically designated (manufacturer/engine family or reserved). All such reports shall include all credits involved in certification averaging, banking, or trading.

(c) Manufacturers must monitor projected versus actual production throughout the

model year to ensure that compliance with emission standards is achieved at the end of the model year

(d) At the end of the model year, the manufacturer must provide the end-of-year reports required under §94.309.

(1) Projected credits based on the information supplied in the certification application may be used to obtain a certificate of conformity. However, any such projected credits must be validated based on review of the end of model year reports and may be revoked at a later time based on follow-up audits or any other verification measure deemed appropriate by the Administrator.

(2) Compliance for engine families using averaging, banking, or trading will be determined at the end of the model year. Manufacturers that have certified engine families with credit balances for THC+NO_x and/or PM that do not equal or exceed zero shall be in violation of the conditions of the certificate of conformity for such engine families. The certificate of conformity may be voided ab initio for those engine families.

(e) Other conditions of certification.

(1) All certificates issued are conditional upon compliance by the manufacturer with the provisions of this subpart both during and after the calendar year of production.

(2) Failure to comply with all provisions of this subpart will be considered to be a failure to satisfy the conditions upon which the certificate was issued, and the certificate may be deemed void ab initio.

(3) The manufacturer bears the burden of establishing to the satisfaction of the Administrator that the conditions upon which the certificate was issued were satisfied or waived.

§94.307 Labeling.

For all engines included in the certification averaging, banking, and trading program, the FEL to which the engine is certified must be included on the label required in §94.212.

§94.308 Maintenance of records.

(a) The manufacturer of any engine that is certified under the averaging, banking, and trading program must establish, maintain, and retain the following adequately organized and indexed records for each such engine produced:

- (1) EPA engine family and configuration;
- (2) Engine identification number;
- (3) Engine calendar year and build date;
- (4) Rated power;
- (5) Purchaser and destination or owner; and
- (6) Assembly plant.

(b) The manufacturer of any engine family that is certified under the averaging, banking, and trading program must establish, maintain, and retain the following adequately organized and indexed records for each such family:

- (1) Model year and EPA engine family;
- (2) Family Emission Limit(s) (FEL);
- (3) Rated power for each configuration;
- (4) Projected applicable production/sales volume for the calendar year;
- (5) Actual applicable production/sales volume for the calendar year; and
- (6) Useful life.

(c) Any manufacturer producing an engine family participating in trading of credits must maintain the following records on a quarterly basis for each engine family in the trading program:

- (1) The model year and engine family;
- (2) The actual quarterly and cumulative applicable production/sales volume;

- (3) The values required to calculate credits as given in §94.305;
- (4) The resulting type and number of credits generated/required;
- (5) How and where credit surpluses are dispersed; and
- (6) How and through what means credit deficits are met.

(d) The manufacturer must retain all records required to be maintained under this section for a period of 8 years from the due date for the end-of-calendar year report. Records may be retained as hard copy or reduced to microfilm, ADP diskettes, and so forth, depending on the manufacturer's record retention procedure; provided, that in every case all information contained in the hard copy is retained.

(e) Nothing in this section limits the Administrator's discretion in requiring the manufacturer to retain additional records or submit information not specifically required by this section.

(f) Pursuant to a request made by the Administrator, the manufacturer must submit to the Administrator the information that the manufacturer is required to retain.

(g) EPA may void ab initio a certificate of conformity for an engine family for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request.

§94.309 Reports.

(a) Manufacturers must submit the certification information as required under §94.306, and end-of-year reports each year as part of their participation in certification averaging, banking, and trading programs.

(b) Quarterly reports. All entities involved in credit trades must submit quarterly reports. The reports shall include the source or recipient of the credits, the amount of credits involved plus remaining balances, details regarding the pollutant, and model year as well as the information prescribed in §94.308(c). Copies of contracts related to credit trading must be included or supplied by the buyer, seller, and broker, as applicable.

(c) End-of-year reports must include the information prescribed in §94.308(b). The report shall include a calculation of credit balances for each family to show that the summation of the manufacturer's use of credits results in a credit balance equal to or greater than zero. The report shall be consistent in detail with the information submitted

under §94.306 and show how credit surpluses were dispersed and how credit shortfalls were met on a family specific basis. The end-of-year report shall incorporate any information reflected in previous quarterly reports.

(d) The applicable production/sales volume for quarterly and end-of-year reports must be based on the location of either the point of first retail sale by the manufacturer or the point at which the engine is placed into service, whichever occurs first. This is called the final product purchase location.

(e) Each quarterly and end-of-year report submitted shall include a statement certifying to the accuracy and authenticity of the material reported therein.

(f) Requirements for submission. (1) Quarterly reports must be submitted within 90 days of the end of the calendar quarter to: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division U.S. Environmental Protection Agency, 6403-J, 401 M St., SW, Washington, D.C. 20460.

(2) End-of-year reports must be submitted within 120 days of the end of the calendar year to: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division U.S. Environmental Protection Agency, 6403-J, 401 M St., SW, Washington, D.C. 20460.

(3) Failure by a manufacturer participating in the averaging, banking, or trading program to submit any quarterly or end-of-year reports in the specified time for all engines is a violation of sections 203(a)(1) and 213 of the Clean Air Act for each engine.

(4) A manufacturer generating credits for banking only who fails to submit end-of-year reports in the applicable specified time period (120 days after the end of the calendar year) may not use or trade the credits until such reports are received and reviewed by EPA. Use of projected credits pending EPA review is not permitted in these circumstances.

(g) Reporting errors. (1) Errors discovered by EPA or the manufacturer in the end-of-year report, including errors in credit calculation, may be corrected 180-days subsequent to submission of the end-of-year report. Errors discovered by EPA after 180-days shall be correctable if, as a result of the correction, the manufacturer's credits are reduced. Errors in the manufacturer's favor are not corrected if discovered after the 180-day correction period allowed.

(2) If EPA or the manufacturer determines that a reporting error occurred on an end-of-year report previously submitted to EPA under this section, the manufacturer's credits and credit calculations will be recalculated. Erroneous positive credits will be void. Erroneous negative credit balances may be corrected by EPA.

(3) If EPA review of a manufacturer's end-of-year report indicates a credit shortfall, the manufacturer will be permitted to purchase the necessary credits to bring the credit balance to zero. These credits must be supplied at the ratio of 1.1 credits for each 1.0 credit needed. If sufficient credits are not available to bring the credit balance to zero for the family(ies) involved, EPA may void the certificate(s) for that family(ies) *ab initio*. In addition, all engines within an engine family for which there are insufficient credits will be considered to have violated the conditions of the certificate of conformity and therefore are not covered by that certificate.

(4) If within 180 days of receipt of the manufacturer's end-of-year report, EPA review determines a reporting error in the manufacturer's favor (that is, resulting in an increased credit balance) or if the manufacturer discovers such an error within 180 days of EPA receipt of the end-of-year report, the credits are restored for use by the manufacturer.

§94.310 Notice of opportunity for hearing.

Any voiding of the certificate under this subpart will be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with §94.216 and, if a manufacturer requests such a hearing, will be made only after an initial decision by the Presiding Officer.

Subpart E - Emission-related Defect Reporting Requirements, Voluntary Emission Recall Program

§94.401 Applicability.

The requirements of this subpart of this part are applicable to manufacturers of engines subject to the provisions of Subpart A of this part. The requirement to report emission-related defects affecting a given class or category of engines applies for eight years from the end of the year in which such engines were manufactured.

§94.402 Definitions.

The definitions of Subpart A of this part apply to this subpart.

§94.403 Emission defect information report.

(a) A manufacturer must file a defect information report whenever it determines, in accordance with procedures it established to identify either safety-related or performance defects, (or based on other information) that a specific emission-related defect exists in 25 or more Category 1 marine engines, or 10 or more Category 2 marine engines. No report must be filed under this paragraph for any emission-related defect corrected prior to the sale of the affected engines to an ultimate purchaser.

(b) Defect information reports required under paragraph (a) of this section must be submitted not more than 15 working days after the same emission-related defect is found to effect 25 or more Category 1 marine engines, or 10 or more Category 2 marine engines. Information required by paragraph (c) of this section that is either not available within 15 working days or is significantly revised must be submitted as it becomes available.

(c) Except as provided in paragraph (b) of this section, each defect report must contain the following information in substantially the format outlined:

- (1) The manufacturer's corporate name.
- (2) A description of the defect.
- (3) A description of each class or category of engines potentially affected by the defect including make, model, calendar year produced, purchaser and any other information as may be required to identify the engines affected.
- (4) For each class or category of engines described in response to paragraph (c)(3) of this section, the following shall also be provided:
 - (i) The number of engines known or estimated to have the defect and an explanation of the means by which this number was determined.
 - (ii) The address of the plant(s) at which the potentially defective engines were produced.
- (5) An evaluation of the emissions impact of the defect and a description of any operational or performance problems which a defective engine might exhibit.
- (6) Available emissions data which relate to the defect.

(7) An indication of any anticipated follow-up by the manufacturer.

§94.404 Voluntary emissions recall reporting.

(a) When any manufacturer initiates a voluntary emissions recall campaign involving an engine, the manufacturer shall submit to EPA a report describing the manufacturer's voluntary emissions recall plan as prescribed by this section within 15 working days of the date owner notification was begun. The report shall contain the following:

(1) A description of each class or category of engines recalled including the number of engines to be recalled, the calendar year if applicable, the make, the model, and such other information as may be required to identify the engines recalled.

(2) A description of the specific modifications, alterations, repairs, corrections, adjustments, or other changes to be made to correct the engines affected by the emission-related defect.

(3) A description of the method by which the manufacturer will notify engine owners.

(4) A description of the proper maintenance or use, if any, upon which the manufacturer conditions eligibility for repair under the remedial plan, an explanation of the manufacturer's reasons for imposing any such condition, and a description of the proof to be required of an engine owner to demonstrate compliance with any such condition.

(5) A description of the procedure to be followed by engine owners to obtain correction of the nonconformity. This shall include designation of the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor to remedy the defect, and the designation of facilities at which the defect can be remedied.

(6) If some or all the nonconforming engines are to be remedied by persons other than authorized warranty agents of the manufacturer, a description of the class of persons other than authorized warranty agents of the manufacturer who will remedy the defect.

(7) A copy of any written notification sent to engine owners.

(8) A description of the system by which the manufacturer will assure that an adequate supply of parts will be available to perform the repair under the remedial plan including the date by which an adequate supply of parts will be available to initiate the repair campaign, the percentage of the total parts requirement of each person who is to perform the repair under the remedial plan to be shipped to initiate the campaign, and the method to be used to assure the supply remains both adequate and responsive to owner demand.

(9) Three copies of all necessary instructions to be sent to those persons who are to perform the repair under the remedial plan.

(10) A description of the impact of the changes on fuel consumption, operation or performance, and safety of each class or category of engines to be recalled.

(11) A sample of any label to be applied to engines which participate in the voluntary recall campaign.

(b) Unless otherwise specified by the Administrator, the manufacturer shall report on the progress of the recall campaign by submitting subsequent reports for six consecutive quarters, or until proven that remedial action has been adequately taken on all affected

engines, whichever occurs first, commencing with the quarter after the voluntary emissions recall campaign actually begins. Such reports shall be submitted no later than 25 working days after the close of each calendar quarter. For each class or group of engine subject to the voluntary emissions recall campaign, the quarterly report shall contain the:

- (1) Emission recall campaign number, if any, designated by the manufacturer.
- (2) Date owner notification was begun, and date completed.
- (3) Number of engines involved in the voluntary emissions recall campaign.
- (4) Number of engines known or estimated to be affected by the emission-related defect and an explanation of the means by which this number was determined.
- (5) Number of engines inspected pursuant to voluntary emission recall plan.
- (6) Number of inspected engines found to be affected by the emissions-related defect.
- (7) Number of engines actually receiving repair under the remedial plan.
- (8) Number of engines determined to be unavailable for inspection or repair under the remedial plan due to exportation, scrapping, or for other reasons (specify).
- (9) Number of engines determined to be ineligible for remedial action due to a failure to properly maintain or use such engines.
- (10) Three copies of any service bulletins which relate to the defect to be corrected and which have not previously been reported.
- (11) Three copies of all communications transmitted to engine owners which relate to the defect to be corrected and which have not previously been submitted.

(c) If the manufacturer determines that any of the information requested in paragraph (b) of this section has changed or was incorrect, revised information and an explanatory note shall be submitted. Answers to paragraphs (b)(5), (6), (7), (8), and (9) of this section shall be cumulative totals.

(d) The manufacturer shall maintain in a form suitable for inspection, such as computer information storage devices or card files, the names and addresses of engine owners:

- (1) To whom notification was given;
- (2) Who received remedial repair or inspection under the remedial plan; and
- (3) Who were determined not to qualify for such remedial action when eligibility is conditioned on proper maintenance or use.

(e) The records described in paragraph (d) of this section shall be made available to the Administrator upon request.

§94.405 Alternative report formats.

(a) Any manufacturer may submit a plan for making either of the reports required by §§ 94.403 and 94.404 on computer diskettes, magnetic tape or other machine readable format. The plan shall be accompanied by sufficient technical detail to allow a determination that data requirements of these sections will be met and that the data in such format will be usable by EPA.

(b) Upon approval by the Administrator of the reporting system, the manufacturer may use such system until otherwise notified by the Administrator.

§94.406 Reports filing: record retention.

(a) The reports required by §§94.403 and 94.404 shall be sent to: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division, U.S. Environmental Protection Agency, 6403-J, 401 M St., S.W., Washington, D.C. 20460.

(b) The information gathered by the manufacturer to compile the reports required by §§94.403 and 94.404 shall be retained for not less than 8 years from the date of the manufacture of the engines and shall be made available to duly authorized officials of the EPA upon request.

§94.407 Responsibility under other legal provisions preserved.

The filing of any report under the provisions of this subpart shall not affect a manufacturer's responsibility to file reports or applications, obtain approval, or give notice under any provision of law.

§94.408 Disclaimer of production warranty applicability.

(a) The act of filing an Emission Defect Information Report pursuant to §94.403 is inconclusive as to the existence of a defect subject to the warranty provided by section 207(a) of the Act.

(b) A manufacturer may include on each page of its Emission Defect Information Report a disclaimer stating that the filing of a Defect Information Report pursuant to these regulations is not conclusive as to the applicability of the Production Warranty provided by section 207(a) of the Act.

Subpart F - Manufacturer Production Line Testing Programs

§94.501 Applicability.

The requirements of this subpart of this part are applicable to manufacturers of engines subject to the provisions of Subpart A of this part.

§94.502 Definitions.

The definitions in Subpart A of this part apply to this subpart.

§94.503 General Requirements

(a) Manufacturers shall test production line engines in accordance with sampling procedures specified in §94.505 and the test procedures specified in §94.506.

(b) The Administrator may waive some or all of the requirements of this subpart.

(c) The requirements of this subpart apply with respect to all applicable standards and FELs of Subpart A of this part, including the supplemental standards of §94.8(e).

§94.504 Right of entry and access.

(a) To allow the Administrator to determine whether a manufacturer is complying with the provisions of this part, one or more EPA enforcement officers may enter during operating hours and upon presentation of credentials any of the following places:

(1) Any facility, including ports of entry, where any engine is to be introduced into commerce or any emission-related component is manufactured, assembled, or stored;

(2) Any facility where any test conducted pursuant to a manufacturer's production line testing program or any procedure or activity connected with such test is or was performed;

(3) Any facility where any test engine is present; and

(4) Any facility where any record required under §94.509 or other document relating to this subpart is located.

(b) Upon admission to any facility referred to in paragraph (a) of this section, EPA enforcement officers are authorized to perform the following inspection-related activities:

(1) To inspect and monitor any aspect of engine manufacture, assembly, storage, testing and other procedures, and to inspect and monitor the facilities in which these procedures are conducted;

(2) To inspect and monitor any aspect of engine test procedures or activities, including test engine selection, preparation and service accumulation, emission test cycles, and maintenance and verification of test equipment calibration;

(3) To inspect and make copies of any records or documents related to the assembly, storage, selection, and testing of an engine; and

(4) To inspect and photograph any part or aspect of any engine and any component used in the assembly thereof that is reasonably related to the purpose of the entry.

(c) EPA enforcement officers are authorized to obtain reasonable assistance without cost from those in charge of a facility to help the officers perform any function listed in this subpart and they are authorized to request the manufacturer to make arrangements with those in charge of a facility operated for the manufacturer benefit to furnish reasonable assistance without cost to EPA.

(1) Reasonable assistance includes, but is not limited to, clerical, copying, interpretation and translation services; the making available on an EPA enforcement officer's request of personnel of the facility being inspected during their working hours to inform the EPA enforcement officer of how the facility operates and to answer the officer's questions; and the performance on request of emission tests on any engine which is being, has been, or will be used for production line testing.

(2) By written request, signed by the Assistant Administrator for Air and Radiation or the Assistant Administrator for Enforcement and Compliance Assurance, and served on the manufacturer, a manufacturer may be compelled to cause the personal appearance of any employee at such a facility before an EPA enforcement officer. Any such employee who has been instructed by the manufacturer to appear will be entitled to be accompanied, represented, and advised by counsel.

(d) EPA enforcement officers are authorized to seek a warrant or court order authorizing the EPA enforcement officers to conduct the activities authorized in this section, as appropriate, to execute the functions specified in this section. EPA enforcement officers may proceed *ex parte* to obtain a warrant or court order whether or

not the EPA enforcement officers first attempted to seek permission from the manufacturer or the party in charge of the facility(ies) in question to conduct the activities authorized in this section.

(e) A manufacturer is responsible for locating its foreign testing and manufacturing facilities in jurisdictions where local law does not prohibit an EPA enforcement officer(s) from conducting the activities specified in this section. EPA will not attempt to make any inspections which it has been informed local foreign law prohibits.

§94.505 Sample selection for testing.

(a) At the start of each model year, the manufacturer will begin to select engines from each engine family for production line testing. Each engine will be selected from the end of the production line. Testing shall be performed throughout the entire model year to the extent possible. Engines selected shall cover the broadest range of production possible.

(1)(i) The required sample size for a Category 1 engine family is one percent of projected annual production for all engine families, provided that no engine tested fails to meet applicable emission standards. The required sample size is zero if a manufacturer's projected annual production for all engine families is less than 100.

(ii) The required sample size for a Category 2 engine family is one percent of projected annual production for all engine families, with a minimum sample size of one test per model year provided that no engine tested fails to meet applicable emission standards.

(2) Manufacturers may elect to test additional engines. All additional engines must be tested in accordance with the applicable test procedures of this part.

(3) The Administrator may reject any engines selected by the manufacturer if he or she determines that such engines are not representative of actual production.

(b) The manufacturer must assemble the test engines using the same mass production process that will be used for engines to be introduced into commerce.

(c) No quality control, testing, or assembly procedures will be used on any test engine or any portion thereof, including parts and subassemblies, that have not been or will not be used during the production and assembly of all other engines of that family, except with the approval of the Administrator.

§94.506 Test procedures.

(a)(1) For engines subject to the provisions of this subpart, the prescribed test procedures are those procedures described in Subpart B of this part, except as provided in this section.

(2) The Administrator may, on the basis of a written application by a manufacturer, prescribe test procedures other than those specified in paragraph (a)(1) of this section for any engine he/she determines is not susceptible to satisfactory testing using procedures specified in paragraph (a)(1) of this section.

(3) If test procedures other than those in Subpart B were used in certification of the engine family being tested under this subpart (other than alternate test procedures

necessary for testing of a development engine instead of a low hour engine under §94.9), the manufacturer shall use the test procedures used in certification for production line testing.

(b)(1) The manufacturer may not adjust, repair, prepare, modify, or perform any emission test on any test engine unless this adjustment, repair, preparation, modification and/or test is documented in the manufacturer's engine assembly and inspection procedures and is actually performed by the manufacturer or unless this adjustment, repair, preparation, modification and/or test is required or permitted under this subpart or is approved in advance by the Administrator.

(2) Any adjustable engine parameter must be set to values or positions that are within the range specified in the approved application for certification .

(3) The Administrator may adjust or require to be adjusted any engine parameter which the Administrator has determined to be subject to adjustment for certification and production line testing, to any setting within the specified adjustable range of that parameter, as determined by the Administrator, prior to the performance of any test.

(c) Service Accumulation/Green Engine Factor. The manufacturer shall accumulate up to 300 hours of service on the engines to be tested. In lieu of conducting such service accumulation, the manufacturer may establish a Green Engine Factor for each regulated pollutant for each engine family to be used in calculating emissions test results. The manufacturer shall obtain the approval of the Administrator prior to using a Green Engine Factor.

(d) The manufacturer may not perform any maintenance on test engines after selection for testing.

(e) If an engine is shipped to a facility other than the production facility for production line testing, and an adjustment or repair is necessary because of such shipment, the engine manufacturer must perform the necessary adjustment or repair only after the initial test of the engine, except where the Administrator has determined that the test would be impossible to perform or would permanently damage the engine.

(f) If an engine cannot complete the service accumulation (if applicable) or an emission test, because of a malfunction, the manufacturer may request that the Administrator authorize either the repair of that engine or its deletion from the test sequence.

(g) Retesting. If an engine manufacturer determines that any production line emission test of an engine is invalid, the engine must be retested in accordance with the requirements of this subpart. Emission results from all tests must be reported to EPA, including test results the manufacturer determines are invalid. The engine manufacturer must also include a detailed explanation of the reasons for invalidating any test in the quarterly report required in §94.508(e). In the event a retest is performed, a request may be made to the Administrator, within ten days of the end of the production quarter, for permission to substitute the after-repair test results for the original test results. The Administrator will either affirm or deny the request by the engine manufacturer within ten working days from receipt of the request.

§94.507 Sequence of testing.

(a) If one or more engines fail a production line test, then the manufacturer must test two additional engines for each engine that fails.

(b) The two additional engines tested under paragraph (a) of this section shall be selected from either the next fifteen produced in that engine family, or from those engines produced in that engine family within 48 hours of the completion of the failed test.

§94.508 Calculation and reporting of test results.

(a) Manufacturers shall calculate initial test results using the applicable test procedure specified in § 94.506(a). These results must also include the Green Engine Factor, if applicable. The manufacturer shall round these results, in accordance with ASTM E29-93a (incorporated by reference at §94.5), to the number of decimal places contained in the applicable emission standard expressed to one additional significant figure.

(b) Final test results shall be calculated by summing the initial test results derived in paragraph (a) of this section for each test engine, dividing by the number of tests conducted on the engine, and rounding in accordance with ASTM E29-93a (incorporated by reference at §94.5) to the same number of decimal places contained in the applicable standard expressed to one additional significant figure.

(c) Manufacturers shall calculate the final test results for each test engine by applying the appropriate deterioration factors, derived in the certification process for the engine family, to the final test results, and rounding in accordance with ASTM E 29-93a (incorporated by reference at §94.5) to the same number of decimal places contained in the applicable standard expressed to one additional significant figure.

(d) If, subsequent to an initial failure of a production line test, the average of the test results for the failed engine and the two additional engines tested, is greater than any applicable emission standard or FEL, the engine family is deemed to be in non-compliance with applicable emission standards, and the manufacturer must notify the Administrator within 2 working days of such noncompliance.

(e) Within 30 calendar days of the end of each quarter, each manufacturer must submit to the Administrator a report which includes the following information:

(1) The location and description of the manufacturer's emission test facilities which were utilized to conduct testing reported pursuant to this section;

(2) Total production and sample size for each engine family;

(3) The applicable standards and/or FELs against which each engine family was tested;

(4) A description of the test engines;

(5) For each test conducted:

(i) A description of the test engine, including:

(A) Configuration and engine family identification;

(B) Year, make, and build date;

(C) Engine identification number;

(D) Number of hours of service accumulated on engine prior to testing; and

(E) Description of Green Engine Factor; how it is determined and how it is applied;

(ii) Location(s) where service accumulation was conducted and description of

accumulation procedure and schedule, if applicable;

(iii) Test number, date, test procedure used, initial test results before and after rounding, and final test results for all production line emission tests conducted, whether valid or invalid, and the reason for invalidation of any test results, if applicable;

(iv) A complete description of any adjustment, modification, repair, preparation, maintenance, and testing which was performed on the test engine, has not been reported pursuant to any other paragraph of this subpart, and will not be performed on other production engines;

(v) Any other information the Administrator may request relevant to the determination whether the new engines being manufactured by the manufacturer do in fact conform with the regulations with respect to which the certificate of conformity was issued;

(6) For each failed engine as defined in §94.510(a), a description of the remedy and test results for all retests as required by §94.512(g);

(7) The date of the end of the engine manufacturer's model year production for each engine family tested; and

(8) The following signed statement and endorsement by an authorized representative of the manufacturer:

This report is submitted pursuant to Sections 213 and 208 of the Clean Air Act. This production line testing program was conducted in complete conformance with all applicable regulations under 40 CFR part 94. No emission-related changes to production processes or quality control procedures for the engine family tested have been made during this production line testing program that affect engines from the production line. All data and information reported herein is, to the best of (Company Name) knowledge, true and accurate. I am aware of the penalties associated with violations of the Clean Air Act and the regulations thereunder. (Authorized Company Representative.)

§94.509 Maintenance of records; submittal of information.

(a) The manufacturer for any new engine subject to any of the provisions of this subpart must establish, maintain, and retain the following adequately organized and indexed records:

(1) General records. A description of all equipment used to test engines in accordance with § 94.503. The equipment requirements in Subpart B of this part apply to tests performed under this subpart.

(2) Individual records. These records pertain to each production line test conducted pursuant to this subpart and include:

(i) The date, time, and location of each test;

(ii) The method by which the Green Engine Factor was calculated or the number of hours of service accumulated on the test engine when the test began and ended;

(iii) The names of all supervisory personnel involved in the conduct of the production line test;

(iv) A record and description of any adjustment, repair, preparation or modification performed on test engines, giving the date, associated time, justification, name(s) of the authorizing personnel, and names of all supervisory personnel responsible for the conduct

of the action;

(v) If applicable, the date the engine was shipped from the assembly plant, associated storage facility or port facility, and the date the engine was received at the testing facility;

(vi) A complete record of all emission tests performed pursuant to this subpart (except tests performed directly by EPA), including all individual worksheets and/or other documentation relating to each test, or exact copies thereof, in accordance with the record requirements specified in Subpart B of this part;

(vii) A brief description of any significant events during testing not otherwise described under this paragraph (a)(2) of this section, commencing with the test engine selection process and including such extraordinary events as engine damage during shipment.

(3) The manufacturer must establish, maintain and retain general records, pursuant to paragraph (a)(1) of this section, for each test cell that can be used to perform emission testing under this subpart.

(b) The manufacturer must retain all records required to be maintained under this subpart for a period of eight (8) years after completion of all testing. Records may be retained as hard copy (i.e., on paper) or reduced to microfilm, floppy disk, or some other method of data storage, depending upon the manufacturer's record retention procedure; provided, that in every case, all the information contained in the hard copy is retained.

(c) The manufacturer must, upon request by the Administrator, submit the following information with regard to engine production:

(1) Projected production for each configuration within each engine family for which certification has been requested and/or approved.

(2) Number of engines, by configuration and assembly plant, scheduled for production.

(d) Nothing in this section limits the Administrator's discretion to require a manufacturer to establish, maintain, retain or submit to EPA information not specified by this section.

(e) All reports, submissions, notifications, and requests for approval made under this subpart must be addressed to: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division 6403-J, U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460.

(f) The manufacturer must electronically submit the results of its production line testing using an EPA information format.

§94.510 Compliance with criteria for production line testing.

(a) A failed engine is one whose final test results pursuant to § 94.508(c), for one or more of the applicable pollutants, exceed an applicable emission standard or FEL.

(b) An engine family is deemed to be in noncompliance, for purposes of this subpart, if at any time throughout the model year, the average of an initial failed engine and the two additional engines tested, is greater than any applicable emission standard or FEL.

§94.511 [Reserved]

§94.512 Suspension and revocation of certificates of conformity.

(a) The certificate of conformity is suspended with respect to any engine that fails a production line test pursuant to §94.510(a), effective from the time the testing of that engine is completed.

(b) The Administrator may suspend the certificate of conformity for an engine family which is in noncompliance pursuant to §94.510(b), thirty days after the engine family is deemed to be in noncompliance.

(c) If the results of testing pursuant to these regulations in this subpart indicate that engines of a particular family produced at one plant of a manufacturer do not conform to the regulations with respect to which the certificate of conformity was issued, the Administrator may suspend the certificate of conformity with respect to that family for engines manufactured by the manufacturer at all other plants.

(d) The Administrator may suspend a certificate of conformity for any engine family in whole or in part if:

(1) The manufacturer fails to comply with any of the requirements of this subpart.

(2) The manufacturer submits false or incomplete information in any report or information provided to the Administrator under this subpart.

(3) The manufacturer renders inaccurate any test data submitted under this subpart.

(4) An EPA enforcement officer is denied the opportunity to conduct activities authorized in this subpart.

(5) An EPA enforcement officer is unable to conduct activities authorized in § 94.504 for any reason.

(e) The Administrator shall notify the manufacturer in writing of any suspension or revocation of a certificate of conformity in whole or in part; a suspension or revocation is effective upon receipt of such notification or thirty days from the time an engine family is deemed to be in noncompliance under §§94.508(d), 94.510(a), or 94.510(b), whichever is earlier, except that the certificate is immediately suspended with respect to any failed engines as provided for in paragraph (a) of this section.

(f) The Administrator may revoke a certificate of conformity for an engine family when the certificate has been suspended pursuant to paragraph (b) or (c) of this section if the remedy is one requiring a design change or changes to the engine and/or emission control system as described in the application for certification of the affected engine family.

(g) Once a certificate has been suspended for a failed engine, as provided for in paragraph (a) of this section, the manufacturer must take the following actions before the certificate is reinstated for that failed engine:

(1) Remedy the nonconformity;

(2) Demonstrate that the engine conforms to applicable standards or family emission limits by retesting if applicable, the engine in accordance with this part; and

(3) Submit a written report to the Administrator, after successful completion of testing on the failed engine, which contains a description of the remedy and test results for each engine in addition to other information that may be required by this part.

(h) Once a certificate for a failed engine family has been suspended pursuant to paragraph (b) or (c) of this section, the manufacturer must take the following actions

before the Administrator will consider reinstating the certificate:

(1) Submit a written report to the Administrator which identifies the reason for the noncompliance of the engines, describes the remedy, including a description of any quality control and/or quality assurance measures to be taken by the manufacturer to prevent future occurrences of the problem, and states the date on which the remedies will be implemented.

(2) Demonstrate that the engine family for which the certificate of conformity has been suspended does in fact comply with the regulations of this part by testing engines selected from normal production runs of that engine family. Such testing must comply with the provisions of this subpart. If the manufacturer elects to continue testing individual engines after suspension of a certificate, the certificate is reinstated for any engine actually determined to be in conformance with the applicable standards or family emission limits through testing in accordance with the applicable test procedures, provided that the Administrator has not revoked the certificate pursuant to paragraph (f) of this section.

(i) Once the certificate has been revoked for an engine family, if the manufacturer desires to continue introduction into commerce of a modified version of that family, the following actions must be taken before the Administrator may issue a certificate for that modified family:

(1) If the Administrator determines that the change(s) in engine design may have an effect on emission performance deterioration, the Administrator shall notify the manufacturer, within five working days after receipt of the report in paragraph (h)(1) of this section, whether subsequent testing under this subpart will be sufficient to evaluate the change or changes or whether additional testing will be required; and

(2) After implementing the change or changes intended to remedy the nonconformity, the manufacturer must demonstrate that the modified engine family does in fact conform with the regulations of this part by testing engines selected from normal production runs of that engine family. When both of these requirements are met, the Administrator shall reissue the certificate or issue a new certificate, as the case may be, to include that family. If this subsequent testing reveals failing data the revocation remains in effect.

(j) At any time subsequent to an initial suspension of a certificate of conformity for a test engine pursuant to paragraph (a) of this section, but not later than 30 days (or such other period as may be allowed by the Administrator) after notification of the Administrator's decision to suspend or revoke a certificate of conformity in whole or in part pursuant to paragraphs (b), (c), or (f) of this section, a manufacturer may request a hearing as to whether the tests have been properly conducted or any sampling methods have been properly applied.

(k) Any suspension of a certificate of conformity under paragraphs (a),(b),(c) and (d) of this section:

(1) Shall be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with §§ 94.513, 94.514, and 94.515 and

(2) Need not apply to engines no longer in the possession of the manufacturer.

(l) After the Administrator suspends or revokes a certificate of conformity pursuant to this section or voids a certificate of conformity under paragraph §94.215, and prior to the

commencement of a hearing under § 94.513, if the manufacturer demonstrates to the Administrator's satisfaction that the decision to suspend, revoke, or void the certificate was based on erroneous information, the Administrator shall reinstate the certificate.

(m) To permit a manufacturer to avoid storing non-test engines while conducting subsequent testing of the noncomplying family, a manufacturer may request that the Administrator conditionally reinstate the certificate for that family. The Administrator may reinstate the certificate subject to the following condition: the manufacturer must commit to recall all engines of that family produced from the time the certificate is conditionally reinstated if the family fails subsequent testing and must commit to remedy any nonconformity at no expense to the owner.

§94.513 Request for public hearing.

(a) If the manufacturer disagrees with the Administrator's decision to suspend or revoke a certificate or disputes the basis for an automatic suspension pursuant to § 94.512(a), the manufacturer may request a public hearing.

(b) The manufacturer's request shall be filed with the Administrator not later than 30 days after the Administrator's notification of his or her decision to suspend or revoke, unless otherwise specified by the Administrator. The manufacturer shall simultaneously serve two copies of this request upon the Director of the Engine Programs and Compliance Division, Office of Mobile Sources and file two copies with the Hearing Clerk of the Agency. Failure of the manufacturer to request a hearing within the time provided constitutes a waiver of the right to a hearing. Subsequent to the expiration of the period for requesting a hearing as of right, the Administrator may, in his or her discretion and for good cause shown, grant the manufacturer a hearing to contest the suspension or revocation.

(c) A manufacturer shall include in the request for a public hearing:

(1) A statement as to which configuration(s) within a family is to be the subject of the hearing;

(2) A concise statement of the issues to be raised by the manufacturer at the hearing, except that in the case of the hearing requested under § 94.512(j), the hearing is restricted to the following issues:

(i) Whether tests have been properly conducted (specifically, whether the tests were conducted in accordance with applicable regulations under this part and whether test equipment was properly calibrated and functioning);

(ii) Whether there exists a basis for distinguishing engines produced at plants other than the one from which engines were selected for testing which would invalidate the Administrator's decision under § 94.512(c));

(3) A statement specifying reasons why the manufacturer believes it will prevail on the merits of each of the issues raised; and

(4) A summary of the evidence which supports the manufacturer's position on each of the issues raised.

(d) A copy of all requests for public hearings will be kept on file in the Office of the Hearing Clerk and will be made available to the public during Agency business hours.

§94.514 Administrative procedures for public hearing.

(a) The Presiding Officer shall be an Administrative Law Judge appointed pursuant to 5 U.S.C. 3105 (see also 5 CFR Part 930).

(b) The Judicial Officer shall be an officer or employee of the Agency appointed as a Judicial Officer by the Administrator, pursuant to this section, who shall meet the qualifications and perform functions as follows:

(1) Qualifications. A Judicial Officer may be a permanent or temporary employee of the Agency who performs other duties for the Agency. The Judicial Officer shall not be employed by the Office of Enforcement or have any connection with the preparation or presentation of evidence for a hearing held pursuant to this subpart. The Judicial Officer shall be a graduate of an accredited law school and a member in good standing of a recognized Bar Association of any state or the District of Columbia.

(2) Functions. The Administrator may consult with the Judicial Officer or delegate all or part of the Administrator's authority to act in a given case under this section to a Judicial Officer, provided that this delegation does not preclude the Judicial Officer from referring any motion or case to the Administrator when the Judicial Officer determines such referral to be appropriate.

(c) For the purposes of this section, one or more Judicial Officers may be designated by the Administrator. As work requires, a Judicial Officer may be designated to act for the purposes of a particular case.

(d)(1) In the case of a hearing requested under § 94.512(j), when it clearly appears from the data and other information contained in the request for a hearing that no genuine and substantial question of fact or law exists with respect to the issues specified in § 94.513(c)(2), the Administrator may enter an order denying the request for a hearing and reaffirming the original decision to suspend or revoke a certificate of conformity.

(2) In the case of a hearing requested under § 94.513 to challenge a suspension of a certificate of conformity for the reason(s) specified in § 94.512(d), when it clearly appears from the data and other information contained in the request for the hearing that no genuine and substantial question of fact or law exists with respect to the issue of whether the refusal to comply with this subpart was caused by conditions and circumstances outside the control of the manufacturer, the Administrator may enter an order denying the request for a hearing and suspending the certificate of conformity.

(3) Any order issued under paragraph (d)(1) or (d)(2) of this section has the force and effect of a final decision of the Administrator, as issued pursuant to § 94.516.

(4) If the Administrator determines that a genuine and substantial question of fact or law does exist with respect to any of the issues referred to in paragraphs (d)(1) and (d)(2) of this section, the Administrator shall grant the request for a hearing and publish a notice of public hearing in the Federal Register or by such other means as the Administrator finds appropriate to provide notice to the public.

(e) Filing and service. (1) An original and two copies of all documents or papers required or permitted to be filed pursuant to this section and § 94.513(c) must be filed with the Hearing Clerk of the Agency. Filing is considered timely if mailed, as determined by the postmark, to the Hearing Clerk within the time allowed by this section

and § 94.513(b). If filing is to be accomplished by mailing, the documents must be sent to the address set forth in the notice of public hearing referred to in paragraph (d)(4) of this section.

(2) To the maximum extent possible, testimony will be presented in written form. Copies of written testimony will be served upon all parties as soon as practicable prior to the start of the hearing. A certificate of service will be provided on or accompany each document or paper filed with the Hearing Clerk. Documents to be served upon the Director of the Engine Programs and Compliance Division must be sent by registered mail to: Director, Engine Programs and Compliance Division 6403-J, U.S. Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460. Service by registered mail is complete upon mailing.

(f) Computation of time. (1) In computing any period of time prescribed or allowed by this section, except as otherwise provided, the day of the act or event from which the designated period of time begins to run is not included. Saturdays, Sundays, and federal legal holidays are included in computing the period allowed for the filing of any document or paper, except that when the period expires on a Saturday, Sunday, or federal legal holiday, the period is extended to include the next following business day.

(2) A prescribed period of time within which a party is required or permitted to do an act is computed from the time of service, except that when service is accomplished by mail, three days will be added to the prescribed period.

(g) Consolidation. The Administrator or the Presiding Officer in his or her discretion may consolidate two or more proceedings to be held under this section for the purpose of resolving one or more issues whenever it appears that consolidation will expedite or simplify consideration of these issues. Consolidation does not affect the right of any party to raise issues that could have been raised if consolidation had not occurred.

(h) Hearing date. To the extent possible hearings under § 94.513 will be scheduled to commence within 14 days of receipt of the request for a hearing.

§94.515 Hearing procedures.

The procedures provided in § 86.1014-84(i) through (s) of this chapter apply for hearings requested pursuant to § 94.513 regarding suspension, revocation, or voiding of a certificate of conformity.

§94.516 Appeal of hearing decision.

The procedures provided in § 86.1014-84(t) through (aa) of this chapter apply for appeals filed with respect to hearings held pursuant to §94.515.

§94.517 Treatment of confidential information.

Except for information required by §94.508(e)(2) and quarterly emission test results described in §94.508(e), information submitted pursuant to this subpart shall be made available to the public by EPA notwithstanding any claim of confidentiality made by the submitter. The provisions for treatment of confidential information described in §94.4

apply to the information required by §94.508(e)(2) and quarterly emission test results described in §94.508(e).

Subpart G [RESERVED]

Subpart H--Recall Regulations

§94.701 Applicability.

The requirements of this subpart are applicable to all nonroad engines subject to the provisions of this part.

§94.702 Definitions.

The definitions in Subpart A of this part apply to this subpart.

§94.703 Applicability of 40 CFR Part 85, Subpart S.

(a) Engines subject to provisions of this part are subject to recall regulations specified in part 85, subpart S of this chapter, except for the items set forth in this section.

(b) In § 85.1801, section 216 of the Clean Air Act applies, rather than section 214 of the Act.

(c) In § 85.1802(a), section 213 of the Act applies, rather than section 202 of the Act.

(d) In § 85.1803(a) and § 85.1805(a)(1) the reference to “family emission limits” as defined in part 94 promulgated under section 213 of the Act applies, rather than the reference to “family particulate emission limits as defined in Part 86 promulgated under section 202 of the Act”.

(e) Throughout the subpart references to “engines” apply rather than references to “vehicles or engines”.

Subpart I - Importation of Nonconforming Engines

§94.801 Applicability.

(a) Except where otherwise indicated, this subpart is applicable to importers of engines (and vessels containing engines) for which the Administrator has promulgated regulations under this part prescribing emission standards, that are offered for importation or imported into the United States, but which engines, at the time of importation or being offered for importation, are not covered by certificates of conformity issued under section 213 and section 206(a) of the Clean Air Act (that is, which are nonconforming engines as defined in §94.2), and this part. Compliance with regulations under this subpart does not relieve any person or entity from compliance with other applicable provisions of the Clean Air Act.

(b) Regulations prescribing further procedures for the importation of engines into the Customs territory of the United States, as defined in 19 U.S.C. 1202, are set forth in U.S. Customs Service regulations (19 CFR Chapter I).

§94.802 Definitions.

The definitions of Subpart A of this part apply to this subpart.

§94.803 Admission.

A nonconforming engine offered for importation may be admitted into the United States pursuant to the provisions of this subpart. In order to obtain admission the importer must submit to the Administrator a written request for approval containing the following:

(a) Identification of the importer of the engine and the importer's address, telephone number, and taxpayer identification number;

(b) Identification of the engine's owner, the owner's address, telephone number, and taxpayer identification number;

(c) Identification of the engine including make, model, identification number, and original production year;

(d) Information indicating the provision in this subpart under which the engine is to be imported;

(e) Identification of the place(s) where the engine is to be stored until EPA approval of the importer's application to the Administrator for final admission;

- (f) Authorization for EPA enforcement officers to conduct inspections or testing otherwise permitted by the Act or regulations thereunder; and
- (g) Such other information as is deemed necessary by the Administrator.

§94.804 Exemptions.

(a) Unless otherwise specified, any person may apply for the exemptions allowed by this section.

(b) Notwithstanding other requirements of this subpart, a nonconforming engine that qualifies for a temporary exemption under this paragraph may be conditionally admitted into the United States if prior written approval for the conditional admission is obtained from the Administrator. Conditional admission is to be under bond. The Administrator may request that the U.S. Customs Service require a specific bond amount to ensure compliance with the requirements of the Act and this subpart. A written request for a temporary exemption from the Administrator shall contain the identification required in §94.803 and information that demonstrates that the engines qualify for an exemption. Noncompliance with provisions of this section may result in the forfeiture of the total amount of the bond and/or exportation of the engine. The following temporary exemptions are permitted by this paragraph (b):

(1) Exemption for repairs or alterations. Upon written approval by EPA, a person may conditionally import under bond a nonconforming engine solely for purpose of repair(s) or alteration(s). The engine may not be operated in the United States other than for the sole purpose of repair or alteration or shipment to the point of repair or alteration and to the port of export. It may not be sold or leased in the United States and is to be exported upon completion of the repair(s) or alteration(s).

(2) Testing exemption. A nonconforming test engine may be conditionally imported by a person subject to the requirements of §94.905. A test engine may be operated in the United States provided that the operation is an integral part of the test. This exemption is limited to a period not exceeding one year from the date of importation unless a request is made by the appropriate importer, and subsequently granted by EPA, concerning the engine in accordance with §94.905 for a subsequent one-year period.

(3) Display exemptions. (i) A nonconforming engine intended solely for display may be conditionally imported under bond subject to the requirements of §94.906(b).

(ii) A display engine may be imported by any person for purposes related to a business or the public interest. Such purposes do not include collections normally inaccessible or unavailable to the public on a daily basis, display of an engine at a dealership, private use, or other purpose that the Administrator determines is not appropriate for display exemptions. A display engine may not be sold or leased in the United States and may not be operated in the United States except for the operation incident and necessary to the display purpose.

(iii) A display exemption is granted for 12 months or for the duration of the display purpose, whichever is shorter. Extensions of up to 12 months each are available upon approval by the Administrator. In no circumstances, however, may the total period

of exemption exceed 36 months.

(c) National security exemption. Notwithstanding any other requirement of this subpart, an engine may be permanently imported into the United States under the national security exemption found at §94.908, if prior written approval for such permanent importation is obtained from the Administrator. A request for approval is to contain the identification information required in §94.803 and information that demonstrates that the importer is entitled to the exemption.

(d) An application for exemption provided for in paragraphs (b) and (c) of this section shall be mailed to: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division U.S. Environmental Protection Agency, 6403-J, 401 M St., S.W., Washington, D.C. 20460, Attention: Imports.

§94.805 Prohibited acts; penalties.

(a) The importation of an engine (including an engine incorporated in an imported marine vessel) which is not covered by a certificate of conformity other than in accordance with this subpart and the entry regulations of the U.S. Customs Service is prohibited. Failure to comply with this section is a violation of section 213(d) and section 203 of the Act.

(b) Unless otherwise permitted by this subpart, during a period of conditional admission, the importer of an engine may not:

- (1) Operate the engine in the United States; or
- (2) Sell or lease or offer the engine for sale or lease.

(c) An engine conditionally admitted pursuant to §94.804 and not otherwise permanently exempted or excluded by the end of the period of conditional admission, or within such additional time as the Administrator and the U.S. Customs Service may allow, is deemed to be unlawfully imported into the United States in violation of section 213(d) and section 203 of the Act, unless the engine has been delivered to the U.S. Customs Service for export or other disposition under applicable Customs laws and regulations by the end of the period of conditional admission. An engine not so delivered is subject to seizure by the U.S. Customs Service.

(d) An importer who violates section 213(d) and section 203 of the Act is subject to a civil penalty under section 205 of the Act and §94.1106. In addition to the penalty provided in the Act and §94.1106, where applicable, a person or entity who imports an engine under the exemption provisions of §94.804 and, who fails to deliver the engine to the U.S. Customs Service by the end of the period of conditional admission is liable for liquidated damages in the amount of the bond required by applicable Customs laws and regulations.

Subpart J - Exclusion and Exemption Provisions

§94.901 Purpose and applicability.

The provisions of this subpart of this part identify excluded engines (i.e., engines not covered by the Act) and allow for the exemption of engines from certain provisions of this part. The applicability of the exclusions is described in §94.903, and the applicability of the exemption allowances is described in §§94.904 through 94.909.

§94.902 Definitions.

The definitions of Subpart A of this part apply to this subpart.

§94.903 Exclusions.

(a) Upon written request with supporting documentation, EPA will make written determinations as to whether certain engines are excluded from applicability of this part. Any engines that are determined to be excluded are not subject to the regulations under this part. Requests to determine whether certain engines are excluded should be sent to: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division U.S. Environmental Protection Agency, 6403-J, 401 M St., SW, Washington, D.C. 20460.

(b) EPA will maintain a list of models of engines that have been determined to be excluded from coverage under this part. This list will be available to the public and may be obtained by writing to the address in paragraph (a) of this section.

(c) In addition to the engines excluded in paragraph (a) of this section, certain engines are not subject to the requirements and prohibitions of this part because they are excluded from the definitions of "marine engine" in §94.2.

§94.904 Exemptions.

(a) Except as specified otherwise in this subpart, the provisions of §§94.904 through 94.911 exempt certain new engines from the standards, other requirements, and prohibitions of this part, except for the requirements of this subpart and the requirements of §94.1104.

(b)(1) Any person may request a testing exemption subject to the provisions of §94.905.

(2) Any engine manufacturer may request a national security exemption subject to the provisions of §94.908.

(3) Engines manufactured for export purposes are exempt without application, subject to the provisions of §94.909, except as otherwise specified by §94.909.

(4) Manufacturer-owned engines are exempt without application, subject to the provisions of §94.906 (a).

(5) Display engines are exempt without application, subject to the provisions of

§94.906 (b).

(6) Engines used solely for the purpose of competition are exempt, subject to the provisions of §94.906 (c).

(7) Auxiliary engines used on foreign trade vessels are exempt, subject to the provisions of §94.906 (d).

(8) Engines that are identical to engines that are covered by a certificate of conformity issued under 40 CFR part 89 or 40 CFR part 92 are exempt, subject to the provisions of §94.907.

§94.905 Testing exemption.

(a)(1) The Administrator may exempt from the standards and/or other requirements and prohibitions of this part new engines that are being used solely for the purpose of conducting a test program. Any person requesting an exemption for the purpose of conducting a test program must demonstrate the following:

(i) That the proposed test program has a purpose which constitutes an appropriate basis for an exemption in accordance this section;

(ii) That the proposed test program necessitates the granting of an exemption;

(iii) That the proposed test program exhibits reasonableness in scope; and

(iv) That the proposed test program exhibits a degree of oversight and control consonant with the purpose of the test program and EPA's monitoring requirements.

(2) Paragraphs (b), (c), (d), and (e) of this section describe what constitutes a sufficient demonstration for each of the four elements identified in paragraphs (a)(1)(i) through (iv) of this section.

(b) With respect to the purpose of the proposed test program, an appropriate purpose would be research, investigations, studies, demonstrations, technology development, or training, but not national security. A concise statement of purpose is a required item of information.

(c) With respect to the necessity that an exemption be granted, necessity arises from an inability to achieve the stated purpose in a practicable manner without performing or causing to be performed one or more of the prohibited acts under §94.1103. In appropriate circumstances, time constraints may be a sufficient basis for necessity, but the cost of certification alone, in the absence of extraordinary circumstances, is not a basis for necessity.

(d) With respect to reasonableness, a test program must exhibit a duration of reasonable length and affect a reasonable number of engines. In this regard, required items of information include:

(1) An estimate of the program's duration; and

(2) The maximum number of engines involved.

(e) With respect to control, the test program must incorporate procedures consistent with the purpose of the test and be capable of affording EPA monitoring capability. As a minimum, required items of information include:

(1) The technical nature of the testing;

- (2) The location(s) of the testing;
- (3) The time, work, or mileage duration of the testing;
- (4) The ownership arrangement with regard to the engines involved in the testing;
- (5) The intended final disposition of the engines;

(6) The manner in which the engine identification numbers will be identified, recorded, and made available; and

(7) The means or procedure whereby test results will be recorded.

(f) A manufacturer of new engines may request a testing exemption to cover engines intended for use in test programs planned or anticipated over the course of a subsequent two-year period. Unless otherwise required by the Director, Engine Programs and Compliance Division, a manufacturer requesting such an exemption need only furnish the information required by paragraphs (a)(1) and (d)(2) of this section along with a description of the recordkeeping and control procedures that will be employed to assure that the engines are used for purposes consistent with paragraph (a) of this section.

(g) For engines being used for the purpose of developing a fundamentally new emission control technology related either to an alternative fuel or an aftertreatment device, the Administrator may exempt the engine from some or all of the applicable standards of this part for the full useful life of the engine, subject to the provisions of paragraphs (a) through (f) of this section.

§94.906 Manufacturer-owned exemption, display exemption, competition exemption, and foreign trade vessel exemption.

(a) Any manufacturer-owned engine, as defined by §94.2, is exempt from §94.1103, without application, if the manufacturer complies with the following terms and conditions:

(1) The manufacturer must establish, maintain, and retain the following adequately organized and indexed information on each exempted engine:

- (i) engine identification number;
- (ii) Use of the engine on exempt status; and
- (iii) Final disposition of any engine removed from exempt status.

(2) The manufacturer must provide right of entry and access to these records to EPA Enforcement Officers as outlined in §94.208.

(3) The manufacturer must permanently affix a label to each engine on exempt status, unless the requirement is waived or an alternate procedure is approved by the Director, Engine Programs and Compliance Division. This label should:

- (i) Be affixed in a readily visible portion of the engine;
- (ii) Be attached in such a manner that cannot be removed without destruction or defacement;
- (iii) State in the English language and in block letters and numerals of a color that contrasts with the background of the label, the following information:
 - (A) The label heading "Emission Control Information";
 - (B) Full corporate name and trademark of manufacturer;

(C) Engine displacement, engine family identification, and model year of engine; or person of office to be contacted for further information about the engine;

(D) The statement "This engine is exempt from the prohibitions of 40 CFR 94.1103."

(4) No provision of paragraph (a)(3) of this section prevents a manufacturer from including any other information it desires on the label.

(5) The engine is not used in revenue-generating service, or sold.

(b) Display exemption. An uncertified engine that is to be used solely for display purposes, and that will only be operated incident and necessary to the display purpose, and will not be sold unless an applicable certificate of conformity has been obtained for the engine, is exempt without request from the standards of this part.

(c) Competition exemption. The Administrator may exempt, upon request, engines that are used solely for the purpose of competition.

(d) Foreign trade exemption. (1) The Administrator may exempt, upon request of the vessel owner, auxiliary engines used on foreign trade vessels.

(2) Vessel owners requesting an exemption under this paragraph (d) must demonstrate to the Administrator that the vessel will spend less than 25 percent of its operating time within 320 nautical kilometers of U.S. territory.

(3) For the purpose of this paragraph (d), the term "vessel owner" includes any entities that have contracted to purchase a new marine vessel.

§94.907 Non-marine-specific engine exemption.

(a)(1) For manufacturers selling non-marine-specific engines to be used as propulsion engines in marine vessels, such engines are exempt, provided:

(i) The engines are covered by a certificate of conformity issued under 40 CFR Part 89 or 40 CFR Part 92;

(ii) The certified emission levels (after application of deterioration factors) are below the numerical levels of the otherwise applicable standards of this part for all pollutants;

(iii) More engines are reasonably projected to be sold and used under the certificate for non-marine use than for use in marine vessels;

(iv) The engine is sold to an engine dresser for marization prior to being placed in a vessel;

(v) The Administrator has approved the exemption as specified in paragraph (d) of this section.

(2) For the purposes of this section "covered by a certificate of conformity issued under 40 CFR Part 89 or 40 CFR Part 92" means that:

(i) The engine complies with all applicable requirements of either 40 CFR Part 89 or 40 CFR Part 92;

(ii) The fuel system of the engine has not been modified after the original manufacture of the engine is complete;

(iii) The engine cooling system of an installed engine meets the original manufacturer's specifications for certified engines;

(iv) No other changes are made to the engine that could reasonably be expected to adversely effect the emissions performance of the engine; and

(v) The original emissions label remains clearly visible on the engine after installation in the vessel.

(b) For manufacturers selling non-marine-specific engines to be used as auxiliary engines in marine vessels, such engines are exempt from the certification requirements of Subpart C of this part and the production line testing requirements of Subpart F of this part, provided that they comply with all of the requirements of paragraph (a) of this section other than the requirement of paragraph (a)(1)(iv) of this section. These engines are not exempt from the standards of Subpart A of this part.

(c) Manufacturers of engines exempted under this section shall:

(1) Report annually to EPA the number of engines exempted under paragraph (a) of this section;

(2) Upon the Administrator's request, provide test data showing the emissions of the engine when it is operated over a typical marine engine cycle; and

(3) Notify purchasers that the engine a dressed non-marine specific engine (e.g., is a dressed locomotive engine) that is exempt from the requirements of this Part 94.

(d)(1) Manufacturers seeking an exemption under this section shall notify the Administrator of such intent in their applications for certification under 40 CFR Part 89 or 40 CFR Part 92.

(2) The Administrator shall deny a non-marine-specific exemption in any case where he/she has evidence that approving such an exemption would be inappropriate because of adverse environmental or economic impacts.

§94.908 National security exemption.

(a)(1) Any marine engine, otherwise subject to this part, which is used in a vessel that exhibits substantial features ordinarily associated with military combat such as armor and/or permanently affixed weaponry and which will be owned and/or used by an agency of the federal government with responsibility for national defense, will be exempt from the regulations in this subpart for purposes of national security. No request for exemption is necessary.

(a)(2) Manufacturers may request a national security exemption for any marine engine, otherwise subject to this part, which does not meet the conditions described in paragraph (a)(1) of this section). A manufacturer requesting a national security exemption must state the purpose for which the exemption is required and the request must be endorsed by an agency of the federal government charged with responsibility for national defense.

(b) EPA will maintain a list of models of marine engines (and the vessels which use them) that have been granted a national security exemption under paragraph (a)(2) of this section. This list will be available to the public and may be obtained by writing to the following address: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division, (6403-J) Environmental Protection Agency, 401 M Street SW, Washington, DC 20460.

§94.909 Export exemptions.

(a) A new engine intended solely for export, and so labeled or tagged on the outside of any container and on the engine, is subject to the provisions of §94.1103, unless the importing country has new marine engine emission standards which differ from EPA standards.

(b) For the purpose of paragraph (a) of this section, a country having no standards whatsoever is deemed to be a country having emission standards which differ from EPA standards.

(c) It is a condition of any exemption for the purpose of export under paragraph (a) of this section, that such exemption is void *ab initio* with respect to a new engine intended solely for export, where such engine is sold, or offered for sale, to an ultimate purchaser or otherwise distributed or introduced into commerce in the United States for purposes other than export.

§94.910 Granting of exemptions.

(a) If upon completion of the review of an exemption request made pursuant to §94.905 or §94.908, EPA determines it is appropriate to grant such an exemption, a memorandum of exemption is to be prepared and submitted to the person requesting the exemption. The memorandum is to set forth the basis for the exemption, its scope, and such terms and conditions as are deemed necessary. Such terms and conditions generally include, but are not limited to, agreements by the applicant to conduct the exempt activity in the manner described to EPA, create and maintain adequate records accessible to EPA at reasonable times, employ labels for the exempt engines setting forth the nature of the exemption, take appropriate measures to assure that the terms of the exemption are met, and advise EPA of the termination of the activity and the ultimate disposition of the engines.

(b) Any exemption granted pursuant to paragraph (a) of this section is deemed to cover any subject engine only to the extent that the specified terms and conditions are complied with. A breach of any term or condition causes the exemption to be void *ab initio* with respect to any engine. Consequently, the causing or the performing of an act prohibited under §94.1103(a)(1) or (a)(3), other than in strict conformity with all terms and conditions of this exemption, renders the person to whom the exemption is granted, and any other person to whom the provisions of §94.1103(a) are applicable, liable to suit under sections 204 and 205 of the Act.

§94.911 Submission of exemption requests.

Requests for exemption or further information concerning exemptions and/or the exemption request review procedure should be addressed to: Group Manager, Engine Compliance Programs Group, Engine Programs and Compliance Division U.S. Environmental Protection Agency, 6403-J, 401 M St., S.W., Washington, D.C. 20460.

Subpart L - General Enforcement Provisions and Prohibited Acts

§94.1101 Applicability.

The requirements of this subpart are applicable to all persons with respect to engines subject to the provisions of Subpart A of this part.

§94.1102 Definitions.

The definitions of subpart A of this part apply to this subpart.

§94.1103 Prohibited acts.

(a) The following acts and the causing thereof are prohibited:

(1)(i)(A) In the case of a manufacturer of new engines, the sale, the offering for sale, the introduction into commerce, the delivery for introduction into commerce, or the distribution in commerce of any new engine manufactured after December 31, 2003 (the effective date of applicable emission standards under this part), unless such engine is covered by a certificate of conformity issued (and in effect) under regulations found in this part.

(B) The manufacture of a engine for the purpose of an act listed in paragraph (a)(1)(i)(A) of this section unless such engine is covered by a certificate of conformity issued (and in effect) under regulations found in this part prior to its introduction into commerce.

(ii) In the case of any person, except as provided in Subpart I of this part, the importation into the United States of any engine manufactured on or after the implementation date of the applicable emission limits for the relevant engine, unless such engine is covered by a certificate of conformity issued (and in effect) under regulations found in this part.

(2)(i) For a person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information required under this part.

(ii) For a person to fail or refuse to permit entry, testing, or inspection authorized under this part.

(iii) For a person to fail or refuse to perform tests, or to have tests performed as required by this part.

(iv) For a person to fail to establish or maintain records as required under this part.

(3)(i) For a person to remove or render inoperative a device or element of design installed on or in a engine in compliance with regulations under this part, or to set any adjustable parameter to a setting outside of the range specified by the manufacturer, as approved in the application for certification by the Administrator.

(ii) For a person to manufacture, sell or offer to sell, or install, a part or component intended for use with, or as part of, a engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative a device or element of design installed on or in a engine in compliance with regulations issued under this part, and where the person knows or should know that the part or component is being offered for sale or installed for this use or put to such use.

(iii) for a person to deviate from the provisions of §94.11 when rebuilding an engine (or rebuilding a portion of an engine or engine system).

(4) For a manufacturer of a new engine subject to standards prescribed under this part:

(i) To sell, offer for sale, or introduce or deliver for introduction into commerce, a new engine unless the manufacturer has complied with the requirements of §94.1107.

(ii) To sell, offer for sale, or introduce or deliver for introduction into commerce, a new engine unless all required labels and tags are affixed to the engine in accordance with §94.212.

(iii) To fail or refuse to comply with the requirements of §94.1108.

(iv) Except as provided in §94.211, to provide directly or indirectly in any communication to the ultimate purchaser or a subsequent purchaser that the coverage of a warranty under the Act is conditioned upon use of a part, component, or system manufactured by the manufacturer or a person acting for the manufacturer or under its control, or conditioned upon service performed by such persons.

(v) To fail or refuse to comply with the terms and conditions of the warranty under §94.1107.

(5) For a manufacturer of marine vessels to distribute in commerce, sell, offer for sale, or deliver for introduction into commerce a new vessel containing an engine not covered by a certificate of conformity.

(6) For any person to install a recreational marine engine in a vessel that is manufactured on or after the implementation date of the applicable standards and that is not a recreational vessel.

(b) For the purposes of enforcement of this part, the following apply:

(1) Nothing in paragraph (a)(3) of this section is to be construed to require the use of any manufacturer's parts in maintaining or repairing a engine.

(2) Actions for the purpose of repair or replacement of a device or element of design or any other item are not considered prohibited acts under paragraph (a)(3)(i) of this section if the action is a necessary and temporary procedure, the device or element is replaced upon completion of the procedure, and the action results in the proper functioning of the device or element of design.

(3) Where the Administrator determines that no engine produced by any manufacturer and is certified to the requirements of this part is available with the appropriate physical or performance characteristics to repower a vessel, the Administrator may allow a replacement engine to be produced without complying with all of the otherwise applicable requirements of this part. Such engine shall not be subject to the prohibitions of paragraph (a)(1) of this section, provided that:

(i) The engine requiring replacement is not certified or is certified to emission standards that are less stringent than those in effect when the replacement engine is built; and

(ii) The engine manufacturer or its agent takes ownership and possession of the engine being replaced in partial exchange for the replacement engine; and

(iii) The replacement engine is clearly labeled with the following language, or similar alternate language approved by the Administrator: THIS ENGINE DOES NOT COMPLY WITH FEDERAL MARINE ENGINE EMISSION REQUIREMENTS. SALE OR

INSTALLATION OF THIS ENGINE FOR ANY PURPOSE OTHER THAN AS A REPLACEMENT ENGINE FOR AN ENGINE MANUFACTURED PRIOR TO JANUARY 1 [INSERT APPROPRIATE YEAR] IS A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY; and

(iv) In cases where an engine is to be imported for replacement purposes under the provisions of this paragraph (b)(3) of this section, the term “engine manufacturer” shall not apply to an individual or other entity that does not possess a current Certificate of Conformity issued by EPA under this part; and

(v) Where the replacement engine is intended to replace an engine that is certified to emission standards that are less stringent than those in effect when the replacement engine is built, the replacement engine shall be identical in all material respects to a certified configuration of the same or later model year as the engine being replaced; and

(vi) Engines sold pursuant to the provisions of this paragraph will neither generate nor use emission credits and will not be part of any accounting under the averaging, banking and trading program.

§94.1104 General enforcement provisions.

(a) Information collection provisions. (1)(i) Every manufacturer of new engines and other persons subject to the requirements of this part must establish and maintain records, perform tests, make reports and provide information the Administrator may reasonably require to determine whether the manufacturer or other person has acted or is acting in compliance with this part or to otherwise carry out the provisions of this part, and must, upon request of an officer or employee duly designated by the Administrator, permit the officer or employee at reasonable times to have access to and copy such records. The manufacturer shall comply in all respects with the requirements of subpart E of this part.

(ii) Every manufacturer or owner of engines exempted from the standards or requirements of this part must establish and maintain records, perform tests, make reports and provide information the Administrator may reasonably require regarding the emissions of such engines.

(2) For purposes of enforcement of this part, an officer or employee duly designated by the Administrator, upon presenting appropriate credentials, is authorized:

(i) to enter, at reasonable times, any establishment of the manufacturer, or of any person whom the manufacturer engaged to perform any activity required under paragraph (a)(1) of this section, for the purposes of inspecting or observing any activity conducted pursuant to paragraph (a)(1) of this section, and

(ii) to inspect records, files, papers, processes, controls, and facilities used in performing an activity required by paragraph (a)(1) of this section, by the manufacturer or by a person whom the manufacturer engaged to perform the activity.

(b) Exemption provision. The Administrator may exempt a new engine from §94.1103 upon such terms and conditions as the Administrator may find necessary for the purpose of export, research, investigations, studies, demonstrations, or training, or for reasons of national security, or for other purposes allowed by Subpart J of this part.

(c) Importation provision. (1) A new engine, offered for importation or imported by a person in violation of §94.1103 is to be refused admission into the United

States, but the Secretary of the Treasury and the Administrator may, by joint regulation, provide for deferring a final determination as to admission and authorizing the delivery of such a engine offered for import to the owner or consignee thereof upon such terms and conditions (including the furnishing of a bond) as may appear to them appropriate to insure that the engine will be brought into conformity with the standards, requirements, and limitations applicable to it under this part.

(2) If a engine is finally refused admission under this paragraph (c), the Secretary of the Treasury shall cause disposition thereof in accordance with the customs laws unless it is exported, under regulations prescribed by the Secretary, within 90 days of the date of notice of the refusal or additional time as may be permitted pursuant to the regulations.

(3) Disposition in accordance with the customs laws may not be made in such manner as may result, directly or indirectly, in the sale, to the ultimate consumer, of a new engine that fails to comply with applicable standards of the Administrator under this part.

(d) Export provision. A new engine intended solely for export, and so labeled or tagged on the outside of the container if used and on the engine, shall be subject to the provisions of §94.1103, except that if the country that is to receive the engine has emission standards that differ from the standards prescribed under subpart A of this part, then the engine must comply with the standards of the country that is to receive the engine.

(e) Recordkeeping. Except where specified otherwise, records required by this part must be kept for eight (8) years.

§94.1105 Injunction proceedings for prohibited acts.

(a) The district courts of the United States have jurisdiction to restrain violations of §94.1103(a).

(b) Actions to restrain violations of §94.1103(a) must be brought by and in the name of the United States. In an action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

§94.1106 Penalties.

(a) Violations. A violation of the requirements of this subpart is a violation of the applicable provisions of the Act, including sections 213(d) and 203, and is subject to the penalty provisions thereunder.

(1) A person who violates §94.1103(a)(1), (a)(4), (a)(5), or (a)(6), or a manufacturer or dealer who violates §94.1103(a)(3)(i) or (iii) is subject to a civil penalty of not more than \$25,000 for each violation unless modified by the Debt Collection Improvement Act and/or regulations issued there under.

(2) A person other than a manufacturer or dealer who violates §94.1103(a)(3)(i) or (iii) or any person who violates §94.1103(a)(3)(ii) is subject to a civil penalty of not more than \$2,500 for each violation unless modified by the Debt Collection Improvement Act and/or regulations issued thereunder.

(3) A violation with respect to §94.1103(a)(1), (a)(3)(i), (a)(4), or (a)(5) constitutes a separate offense with respect to each engine.

(4) A violation with respect to §94.1103(a)(3)(ii) constitutes a separate offense with respect to each part or component. Each day of a violation with respect to §94.1103(a)(5) constitutes a separate offense.

(5) A person who violates §94.1103(a)(2) or (a)(5) is subject to a civil penalty of not more than \$25,000 per day of violation unless modified by the Debt Collection Improvement Act and/or regulations issued there under.

(b) Civil actions. The Administrator may commence a civil action to assess and recover any civil penalty under paragraph (a) of this section.

(1) An action under this paragraph (b) may be brought in the district court of the United States for the district in which the defendant resides or has the Administrator's principal place of business, and the court has jurisdiction to assess a civil penalty.

(2) In determining the amount of a civil penalty to be assessed under this paragraph (b), the court is to take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with Title II of the Act, action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require.

(3) In any such action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

(c) Administrative assessment of certain penalties. (1) Administrative penalty authority. In lieu of commencing a civil action under paragraph (b) of this section, the Administrator may assess any civil penalty prescribed in paragraph (a) of this section, except that the maximum amount of penalty sought against each violator in a penalty assessment proceeding shall not exceed \$200,000, unless the Administrator and the Attorney General jointly determine that a matter involving a larger penalty amount is appropriate for administrative penalty assessment. Any such determination by the Administrator and the Attorney General is not subject to judicial review. Assessment of a civil penalty shall be by an order made on the record after opportunity for a hearing held in accordance with the procedures found at Part 22 of this chapter. The Administrator may compromise, or remit, with or without conditions, any administrative penalty which may be imposed under this section.

(2) Determining amount. In determining the amount of any civil penalty assessed under this paragraph (c), the Administrator shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with Title II of the Act, action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require.

(3) Effect of administrator's action. (i) Action by the Administrator under this paragraph (c) does not affect or limit the Administrator's authority to enforce any provisions of the Act; except that any violation with respect to which the Administrator has commenced and is diligently prosecuting an action under this paragraph (c), or for which the Administrator has issued a final order not subject to further judicial review and for which the violator has paid a penalty assessment under this paragraph shall not be the subject of a civil penalty action under paragraph (b) of this section.

(ii) No action by the Administrator under this paragraph (c) shall affect a person's obligation to comply with a section of this part.

(4) Finality of order. An order issued under this paragraph (c) is to become final 30 days after its issuance unless a petition for judicial review is filed under paragraph (c)(5) of this section.

(5) Judicial review. A person against whom a civil penalty is assessed in accordance with this paragraph (c) may seek review of the assessment in the United States District Court for the District of Columbia or for the district in which the violation is alleged to have occurred, in which such person resides, or where the person's principal place of business is located, within the 30-day period beginning on the date a civil penalty order is issued. The person shall simultaneously send a copy of the filing by certified mail to the Administrator and the Attorney General. The Administrator shall file in the court within 30 days a certified copy, or certified index, as appropriate, of the record on which the order was issued. The court is not to set aside or remand any order issued in accordance with the requirements of this paragraph (c) unless substantial evidence does not exist in the record, taken as a whole, to support the finding of a violation or unless the Administrator's assessment of the penalty constitutes an abuse of discretion, and the court is not to impose additional civil penalties unless the Administrator's assessment of the penalty constitutes an abuse of discretion. In any proceedings, the United States may seek to recover civil penalties assessed under this section.

(6) Collection.

(i) If any person fails to pay an assessment of a civil penalty imposed by the Administrator as provided in this part after the order making the assessment has become final or after a court in an action brought under paragraph (c)(5) of this section has entered a final judgment in favor of the Administrator, the Administrator shall request that the Attorney General bring a civil action in an appropriate district court to recover the amount assessed (plus interest at rates established pursuant to section 6621(a)(2) of the Internal Revenue Code of 1986 (26 U.S.C. 6621(a)(2)) from the date of the final order or the date of final judgment, as the case may be). In such an action, the validity, amount, and appropriateness of the penalty is not subject to review.

(ii) A person who fails to pay on a timely basis the amount of an assessment of a civil penalty as described in paragraph (c)(6)(i) of this section shall be required to pay, in addition to that amount and interest, the United States' enforcement expenses, including attorney's fees and costs for collection proceedings, and a quarterly nonpayment penalty for each quarter during which the failure to pay persists. The nonpayment penalty is an amount equal to ten percent of the aggregate amount of that person's penalties and nonpayment penalties which are unpaid as of the beginning of such quarter.

§94.1107 Warranty provisions.

(a) The manufacturer of each engine must warrant to the ultimate purchaser and each subsequent purchaser or owner that the engine is designed, built, and equipped so as to conform at the time of sale with applicable regulations under section 213 of the Act, and is free from defects in materials and workmanship which cause such engine to fail to conform

with applicable regulations for its warranty period (as determined under §94.10).

(b) For the purposes of this section, the owner of any engine warranted under this part is responsible for the proper maintenance of the engine. Proper maintenance includes replacement and/or service, as needed, at the owner's expense at a service establishment or facility of the owner's choosing, of all parts, items, or devices which were in general use with engines prior to 1999. For diesel engines, this would generally include replacement or cleaning of the fuel delivery and injection system.

§94.1108 In-use compliance provisions.

(a) Effective with respect to engines subject to the requirements of this part:

(1) If the Administrator determines that a substantial number of any class or category of engines, although properly maintained and used, do not conform to the regulations prescribed under section 213 of the Act when in actual use throughout their useful life period (as defined under §94.2), the Administrator shall immediately notify the manufacturer of such nonconformity and require the manufacturer to submit a plan for remedying the nonconformity of the engines with respect to which such notification is given.

(i) The manufacturer's plan shall provide that the nonconformity of any such engines which are properly used and maintained will be remedied at the expense of the manufacturer.

(ii) If the manufacturer disagrees with such determination of nonconformity and so advises the Administrator, the Administrator shall afford the manufacturer and other interested persons an opportunity to present their views and evidence in support thereof at a public hearing. Unless, as a result of such hearing, the Administrator withdraws such determination of nonconformity, the Administrator shall, within 60 days after the completion of such hearing, order the manufacturer to provide prompt notification of such nonconformity in accordance with paragraph (a)(2) of this section.

(2) Any notification required to be given by the manufacturer under paragraph (a)(1) of this section with respect to any class or category of engines shall be given to ultimate purchasers, subsequent purchasers (if known), and dealers (as applicable) in such manner and containing such information as required in Subparts E and H of this part.

(3)(i) The certifying manufacturer shall furnish with each new engine written instructions for the proper maintenance and use of the engine by the ultimate purchaser as required under §94.211.

(ii) The instruction under paragraph (a)(3)(i) of this section must not include any condition on the ultimate purchaser's using, in connection with such engine, any component or service (other than a component or service provided without charge under the terms of the purchase agreement) which is identified by brand, trade, or corporate name. Such instructions also must not directly or indirectly distinguish between service performed by the franchised dealers of such manufacturer, or any other service establishments with which such manufacturer has a commercial relationship, and service performed by independent engine repair facilities with which such manufacturer has no commercial relationship.

(iii) The prohibition of paragraph (a)(3)(ii) of this section may be waived by the Administrator if:

(A) The manufacturer satisfies the Administrator that the engine will function properly only if the component or service so identified is used in connection with such engine; and

(B) The Administrator finds that such a waiver is in the public interest.

(iv) In addition, the manufacturer shall indicate by means of a label or tag permanently affixed to the engine that the engine is covered by a certificate of conformity issued for the purpose of assuring achievement of emission standards prescribed under section 213 of the Act. This label or tag shall also contain information relating to control of emissions as prescribed under §94.212.

(b) The manufacturer bears all cost obligation any dealer incurs as a result of a requirement imposed by paragraph (a) of this section. The transfer of any such cost obligation from a manufacturer to a dealer through franchise or other agreement is prohibited.

(c) If a manufacturer includes in an advertisement a statement respecting the cost or value of emission control devices or systems, the manufacturer shall set forth in the statement the cost or value attributed to these devices or systems by the Secretary of Labor (through the Bureau of Labor Statistics). The Secretary of Labor, and his or her representatives, has the same access for this purpose to the books, documents, papers, and records of a manufacturer as the Comptroller General has to those of a recipient of assistance for purposes of section 311 of the Act.

APPENDIX TO PART 94

Appendix I to Part 94 - Emission Related Engine Parameters and Specifications

I. Basic Engine Parameters -- Reciprocating Engines.

1. Compression ratio.
2. Type of air aspiration (natural, Roots blown, supercharged, turbocharged).
3. Valves (intake and exhaust).
 - a. Head diameter dimension.
 - b. Valve lifter or actuator type and valve lash dimension.
4. Camshaft timing.
 - a. Valve opening - intake exhaust (degrees from TDC or BDC).
 - b. Valve closing - intake exhaust (degrees from TDC or BDC).
 - c. Valve overlap (degrees).
5. Ports -- two stroke engines (intake and/or exhaust).
 - a. Flow area.
 - b. Opening timing (degrees from TDC or BDC).
 - c. Closing timing (degrees from TDC or BDC).

II. Intake Air System.

1. Roots blower/supercharger/turbocharger calibration.
2. Charge air cooling.
 - a. Type (air-to-air; air-to-liquid).
 - b. Type of liquid cooling (engine coolant, dedicated cooling system).
 - c. Performance (charge air delivery temperature ($^{\circ}$ F) at rated power and one other power level under ambient conditions of 80° F and 110° F, and 3 minutes and 15 minutes after selecting rated power, and 3 minutes and 5 minutes after selecting other power level).
3. Temperature control system calibration.
4. Maximum allowable inlet air restriction.

III. Fuel System.

1. General.
 - a. Engine idle speed.
2. Fuel injection -- compression ignition engines.
 - a. Control parameters and calibrations.
 - b. Transient enrichment system calibration.
 - c. Air-fuel flow calibration.
 - d. Altitude compensation system calibration.
 - e. Operating pressure(s).

- f. Injector timing calibration.
- IV. Engine Cooling System.
 - 1. Thermostat calibration.
- V. Exhaust System.
 - 1. Maximum allowable back pressure.
- VI. Exhaust Emission Control System.
 - 1. Air injection system.
 - a. Control parameters and calibrations.
 - b. Pump flow rate.
 - 2. EGR system.
 - a. Control parameters and calibrations.
 - b. EGR valve flow calibration.
 - 3. Catalytic converter system.
 - a. Active surface area.
 - b. Volume of catalyst.
 - c. Conversion efficiency.
 - 4. Backpressure.
- VII. Crankcase Emission Control System.
 - 1. Control parameters and calibrations.
 - 2. Valve calibrations.
- VIII. Auxiliary Emission Control Devices (AECD).
 - 1. Control parameters and calibrations.
 - 2. Component calibration(s).